

TAKE heart

AHRQ's Initiative To Increase Use of Cardiac Rehabilitation



Hybrid Cardiac Rehabilitation (HYCR) Tools and Resources Guide



About This Guide

This guide contains material that were shared by members of the TAKEheart Hybrid Workgroup. These materials come from a range of CR programs that already offered, or were working to implement, a hybrid CR option. Resources, policies or tools that proved useful in one setting may work differently elsewhere. We thus provide these only as illustrative examples and recommend that you carefully consider the fit of these resources to your system and modify them as appropriate.

For more information regarding hybrid cardiac rehabilitation, please visit the TAKEheart website: <https://www.ahrq.gov/takeheart/index.html>.

Acknowledgments

Stephen Hines and Steven Keteyian, Co-leads.

TAKEheart is thankful for the contributions of the hybrid workgroup members, for whom emails are listed gave permission for users of this guide to contact them for further information about their system's experience in introducing and using hybrid CR.

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Section 1: Hybrid Cardiac Rehabilitation (HYCR) Overview

This section contains examples of methods existing HYCR programs used to introduce HYCR to their staff and patients. Each resource identifies the contributor.

1a: Virtual Cardiac Rehab New Patient Assessment & Orientation Process

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary Rehab

**Need to define days/class times for the Day 2, 3, 4 and 30/60/90/discharge reassessments

Day 1—Patient Assessment

- No changes to initial assessment process in Epic or Scott Care or EKG monitoring/exercise but will complete DUKE Activity Index.
- Patients that have hesitancy, transportation, work, care giver challenges, etc. Assessor will discuss Virtual Cardiac Rehab option.
- Assessor will ensure patient meets low to moderate risk stratification, not a fall risk, no cognitive impairment, safe space to exercise.
- All visits (in CR and virtual) will be scheduled in Epic. First two weeks/4 sessions will be in Cardiac Rehab (ideally), 30/60/90-day/discharge re-assessments in Cardiac Rehab.

Day 2—Exercise Orientation

- Physical assessment of orthopedic/ROM limitations
- Review of RPE, THRR, Signs/symptoms
- Review of home equipment, home safety, ability/space/area for home exercise
- Start Cardio and strength training to determine response to exercise/more intensity.
- Give New patient information packet (including how to set up TEAMS)

Day 3—Exercise in cardiac rehab

- Review home exercise expectations
- Introduce exercise log and how to track activity/RPE/minutes.
- Give calendar of month's plan, resistance band book, yellow book.
- Ensure patient technology is set up – have pt. Bring laptop/tablet if possible or as needed.

Day 4—Exercise in Cardiac Rehab

- Review Virtual CR plan, expectations, give contact information of case manager, answer questions, review expectations of participation.

Day 5—First day of Virtual Cardiac Rehab and beyond

- Document session notes in Epic using Virtual CR smart phrase.
- Enter Non-ECG Monitored charge each session.
- Update ITP as usual for phase

1b: Hybrid Cardiopulmonary Rehab Protocols

Contributor: Melissa McMahon, MS, ACSM, EP-C, Manager, Cardiopulmonary Labs, Ann and Robert H Lurie Children's Hospital of Chicago

Protocol

- Cardiac Rehab w/ Monitor is ordered by provider
- Patient will participate in **BOTH** in-person and home-based cardiac rehab
- Patient will be in-person for at least the initial 1-3 sessions, 30-day, 60-day, 90-day and final rehab sessions

Criteria to qualify for Hybrid Cardiac Rehab

- Low to moderate risk patients
 - EF of $\geq 40\%$
 - Arrhythmia free or rhythm controlled
 - No recent history of exertional syncope
 - Stable diagnostic testing
 - No significant deviations from prior testing
 - Testing may vary (ECG, Holter, EST, cardiac cath etc.)
- Team chart review and program medical director approval
 - Absence of severe cardiorespiratory symptoms (baseline or exertional)
 - Deemed functionally stable for independent exercise
 - If undetermined during chart review, physiologist will assess and determine during initial week of monitored sessions
- Approved for hybrid model by provider
- At least 1-month post-op
- Higher risk patients can begin with in-person sessions and transition to home based therapy based upon monitored session stability and approval by ordering provider and program medical director

Session Safety/Supervision Measures

- In-direct supervision is virtually available throughout each hybrid session
- Physiologist will obtain patient address and location in the house prior to starting each session
- Physiologist will verify adult supervision prior to starting each home-based session and obtain parent/household phone number
- Physiologist will complete recent health history prior to the start of each session
- In the event of an emergency, the physiologist will initiate EMS and notify supervising provider
- In the event of an accidental injury

- Physiologist will virtually assess the patient and communicate with the supervising adult
- Physiologist will consult indirect supervising provider for assessment and guidance
 - When deemed necessary, supervising provider will join virtual session to evaluate the patient

Exercise Session Documentation

- Documentation will include an additional safety statement for all home-based sessions.
 - “Patient/family was educated on exercise safety, identification of important signs and symptoms that warrant exercise termination and criteria for seeking immediate medical attention. Patient/family was informed of the general low risk of injury that can occur while using exercise equipment (aerobic and strength) and that all accidental injuries would be virtually assessed by the physiologist or supervising provider with medical guidance provided. The patient/family understands that participation in home-based program sessions are voluntary and elective. The family verbalizes that mishandling of exercise equipment in the home may result in accidental injury that is not of fault to the program or virtual based exercise session.”

1c: Wellstar Virtual CR for Staff and Patients—Sample Flyer

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary Rehab

Kennestone Hospital Virtual Cardiac Rehab

Open to Phase 2 or Phase 3 patients

Class Schedule:

Tuesday & Thursday 2:00p – 3:00p

Target Audience:

- Low to Moderate Risk based on staff clinical assessment.
- Patients with challenges coming into the Cardiac Rehab Center for sessions.
- Must have safe physical space for home exercise.
- Must have access to computer/tablet/laptop and Microsoft TEAMS access.

Class Structure:

- Phase 2 can be EKG Monitored intermittently at Cardiac Rehab facility by utilizing a hybrid model
- Cardio and Strength/balance exercises
- Multiple risk factor education modules
- Case Management with development of and ongoing updates to Individualized Treatment Plan for phase 2 patients.

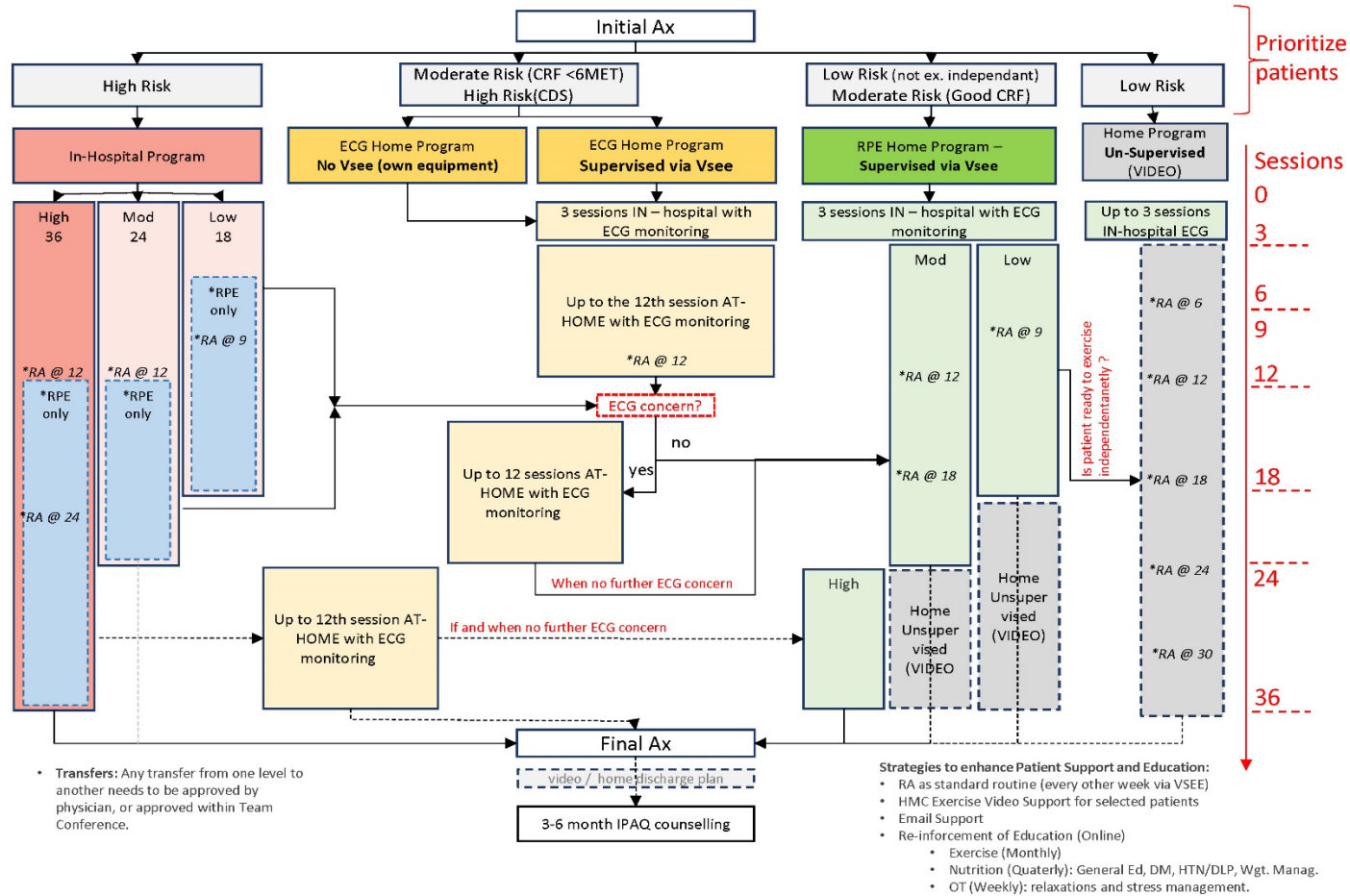
For additional information
Call 770-793-7630 or 770-793-7463



1d: CR Delivery Pathways Overview

Contributor: Javier Loureiro Diaz, ACSM-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

CR PHASE 2 PROGRAM OVERVIEW – Level of Supervision and Transfers





AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

1e: Aultman Virtual Rehab Packet Sample

Contributor::Ashley Eckroate, BSEP, TTS, CCRP, Cardiopulmonary Rehabilitation Exercise Leader, Aultman Deuble Heart and Vascular Hospital

See Packet on following 17 pages.



Deuble Heart & Vascular H♥spital
VIRTUAL REHAB PACKET

Aultman Hospital
2600 Sixth Street S.W.
Canton, Ohio 44710
330-363-5403

Aultman North
6100 Whipple Ave N.W.
Canton, Ohio 44720
330-363-9475

Aultman Massillon
2051 Wales Road
Massillon, Ohio 44646
330-834-4120

BRINGING FITNESS HOME TO YOU.

WELCOME TO VIRTUAL REHAB.

WHAT TO EXPECT:

In these uncertain times, your health is of utmost importance to the staff here in ADHVVH Cardiac and Pulmonary Rehab. Because of this, we're hoping to provide you with access to maintain some of your rehabilitation during this time via virtual instruction.

Prior to beginning virtual programming, you'll register for a classtime. We've worked to try to provide you with both morning and afternoon classes similar to our in-person program. Once you choose this classtime, you'll be asked to provide contact information.

Prior to classtime, you'll be sent a link to the Aultman Now platform to join your class members for a 40-45 minute virtual cardiac rehab experience.

To supplement your virtual class, please utilize this booklet to review resistance training, stretching, breathing exercises, and further resources you can use during this time.

WE'RE EXCITED THAT YOU'RE STICKING WITH US.

MY VIRTUAL CLASSTIME:

DAYS: _____

TIME: _____

Please log on 5 minutes before and MUTE your microphone on the app.

MY TARGET HEART RATE: _____

You will receive a text message or email invite to your rehab session via Aultman Now! at the time listed above.

How do I use AultmanNow? Click the link that was sent to you by text message or email Type your name Click "Join Visit"Click the link to join your exercise session.

If you have any questions about the program, have trouble connecting to your virtual session, or if you will be absent on your assigned day, please call your assigned Aultman location.

Aultman Now is a faster, easier way to receive healthcare – online - using your smartphone, iPad/tablet, or computer. Private and secure, you can use AultmanNow in the comfort of your own home.

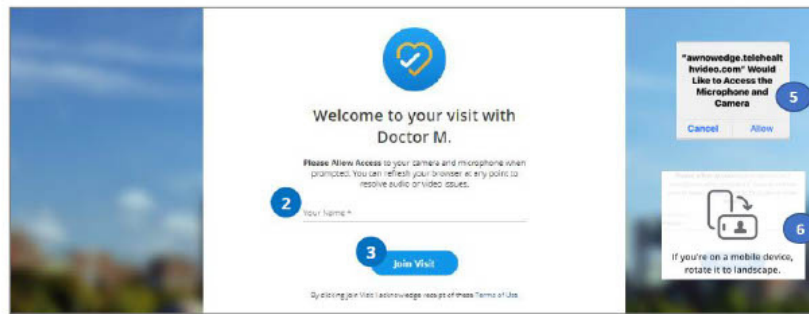
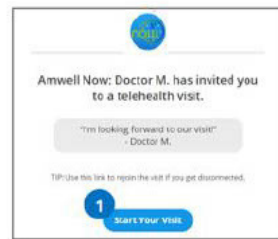
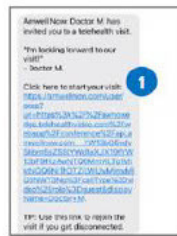
AultmanNow URL Text Link Patient Education

Amwell Now - Patient Guide

Welcome to Amwell Now! You are only a few clicks away from connecting with your provider. Once your provider creates your visit, you will receive an email or SMS text with your invitation and visit details. You can connect through a web browser, such as Google Chrome or Safari, on your computer or mobile device. Please follow the steps below to start your visit.

Getting Started

1. Click the start visit link received through SMS text or email.
2. You will be brought to a welcome screen where you will enter your name.
3. Select **Join Visit**.
4. You will now join your provider in the virtual visit room.



5. Allow Camera & Microphone

6. Rotate Phone to Landscape for larger Screen-

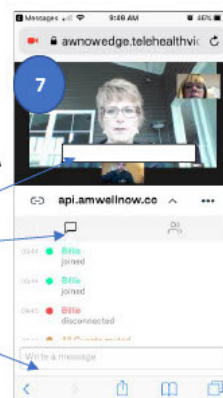
Scroll up to see guests or chat features

7. Visit Begins with Provider-

Buttons- Video, Microphone, Disconnect, move window



8. Chat Feature



For technical issues contact amwellnowsupport@amWell.com
Or Call 1-844-606-1603

WHAT DO YOU NEED?

- Pulse oximeter (Optional, but recommended)
- Pedometer (Optional, but recommended)
- Water
- Sturdy Chair
- Smartphone (iPhone, Android, etc.) -OR- Computer with camera and microphone
- Small Dumbbells, Water bottles, Resistance bands, or cans of soup to use as weights.

WHEN IT'S TIME TO LOG IN...

ADHVH Virtual Rehab programs are delivered in group format with others exercising along with you via AultmanNow Link that will be sent as a text message or email.

Simply click the link, add your name, and click "JOIN VISIT"

Gather the needed items listed above before logging in.

Staff will obtain your vital signs by asking questions. Follow direction throughout this time to be guided through getting a resting heart rate and other vitals we may collect.

If you have been having any new issues such as shortness of breath, chest pain, or weight gain of 1 lb in 24 hours or 3 lbs in one week, please notify us prior to logging on to your session.

A TYPICAL CLASS:

During a typical virtual Cardiac Rehab class, you can expect about 40-45 minutes of guided instruction. This will include education just like our in-person rehab, as well as aerobic and resistance training, followed by cool-down stretches and an opportunity to ask questions.

We ask that you keep your speaker on mute, and will offer instruction on how to do this during our first 5 minutes together. This prevents "reverb" or an echo of the instructors voice from multiple microphones being on at once.

0-5 minutes Welcome

5-15 minutes Education

15-30 minutes Aerobics

30-35 minutes Resistance

35-40 minutes Stretches

40-45 minutes Questions

WHAT ABOUT EQUIPMENT?

We realize that most people do not have access to treadmills or weights at home. That is why we've created our virtual rehab program to utilize low impact walking style aerobics that you can do from the comfort of your home. Much of it you can do standing or seated.

For the resistance training, try using everyday items around your house: cans of soup or water bottles are all excellent options if you do not have access to dumbbells.

If you do not have a pulse oximeter or heart rate monitor, we will also instruct you how to check your pulse during exercise.

RPE: HOW HARD SHOULD I BE WORKING?

Throughout class, you'll hear us ask you how hard you're working. Just like in-person rehab, we want to collect enough data to allow us to update your prescription and make sure you're reaching your goals. We do this through using what's called an RPE scale.

We'd like you to use this talk test, where

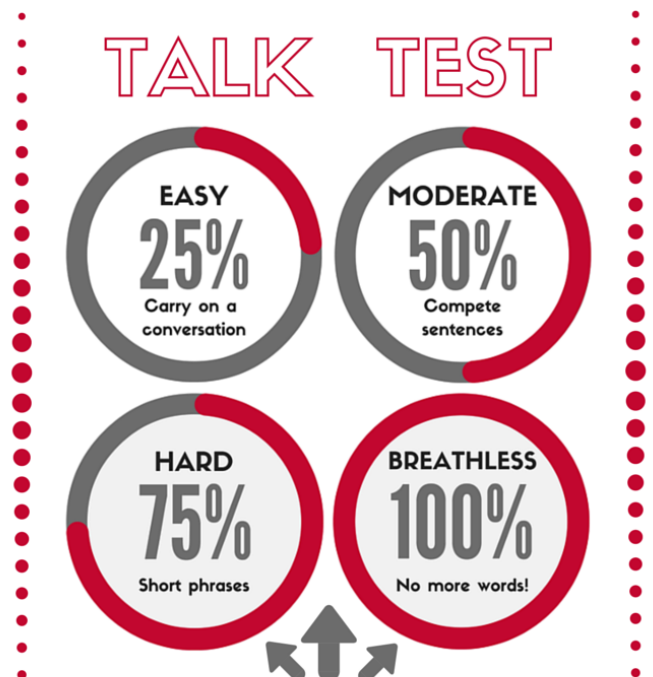
EASY = 3

MODERATE = 4

HARD = 5

VERY HARD/DIFFICULT = 6

When we ask you "HOW HARD" it feels like you're working, just hold the correct number of fingers up to the camera.



THR: TARGET HEART RATE

Before, during, and after class we make ask you to give us your heart rate. You can do this using a pulse-oximeter, heart rate monitor, fit watch, or guided pulse taking led by our staff.

When you exercise with us in a rehab setting, our goal is to help you reach the target heart rate zone that our exercise physiologists have prescribed based on the walk test you did at your orientation. It should be listed on the first page of this guidebook along with your virtual class dates and times.

WHAT IS MY SPO2?

Before, during, and after class we make ask you to give us your SPO2 and your Heart Rate. You can do this using a pulse-oximeter. SPO2 is given by a percentage, for example 95%. We would like your SPO2 to be 90% or above.

During exercise, staff will ask you to place your pulse-oximeter on your finger and show us the number so we can record it on your session report for the day.

WHAT SHOULD AN EXERCISE SESSION LOOK LIKE?

THE WARMUP

The purpose of the warm-up is to gradually increase body temperature, increase blood flow to the exercising muscles, decrease viscosity of the musculature and decrease the incidence of injury due to stressed muscles and joints. A suggested warm-up is to start your preferred mode of exercise at a lower level for a few minutes before increasing your workload to your normal level.

THE WORKOUT

While we typically recommend 30 minutes or more of uninterrupted cardiovascular exercise to obtain cardiovascular benefits, our staff will be guiding you through a 15 minute virtual class. We recommend supplementing your virtual workout with the walking program in the back of this guidebook or other cardiovascular exercise so you can be sure to get the maximum benefits from your time in Cardiac Rehab.

THE COOLDOWN

The purpose of a cool down is to aid in temperature regulation, to maintain blood flow to the muscles decreasing soreness, and to minimize the risk of dizziness or fainting. We'll cool down together by performing some static stretches after our resistance training.

HOME-BASED SAFETY PROCEDURES:

In the off chance that something may happen during an exercise session, we want you to feel confident knowing that we have nurses and physicians on stand-by ready to reach out and assist you.

Alert staff if you have any:

- Chest pain, pressure, aching, or indigestion.
- Pain, pressure, aching or numbness in any party of the body, particularly the neck, arms, or back.
- Dizziness or light headedness
- Unusual shortness of breath
- Any other unusual symptoms.

In the event that this occurs, STOP EXERCISING IMMEDIATELY.

AND HOLD TWO HANDS UP TO THE SCREEN to get the attention of the staff.

A Nurse will call you immediately on the number you provided.

HOW DO I USE THIS GUIDEBOOK?

The following resistance training exercises are the ones we will be guiding you through during virtual rehab. Feel free to look over it beforehand, have it on hand during class times for reference, or use it on your off days.

The stretching and walking program can also help you work toward your rehab training goals.

In the back, you'll also find an exercise diary for logging exercise sessions on your off days from Cardiac Rehab.

We recommend 30 minutes of cardiovascular exercise. Our staff will guide you through 15 minutes of aerobics. To see the most beneficial improvements in cardiac health, you should supplement the aerobic exercise in class with either the walking program or other cardiovascular exercise.

If you need ideas for how to exercise outside of our guided sessions, please reach out to a staff member at your site.

STRENGTH TRAINING:

Resistance training plays a big role in body composition. More muscle means our body burns more calories at rest, but our muscles also support our skeletal system, aiding in balance and strength for the activities of daily living.

During Virtual class times, staff will guide you through the resistance training exercises in this guidebook. You can utilize dumbbells, resistance bands, or other weighted objects around your home. Staff can help you determine what you may have on hand that will work best.

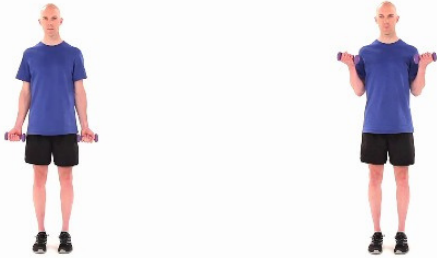
Modifications will be shown during class times if needed.

GUIDED WALKING PROGRAM:

When you're not able to use equipment for cardio, just getting in some amount of walking is beneficial, even if it's just around your home. Included is a sample walking program that you can incorporate to help improve your activities of daily living and to help you reach your goal of 30 minutes of cardiovascular activity.

RESISTANCE TRAINING:

BICEPS CURLS - 10 REPETITIONS, 2 SETS.



Setup: Begin in a standing upright position, holding a dumbbell in each hand, with your palms facing forward.

Movement: Slowly curl both dumbbells up toward your shoulders, then lower them back down and repeat.

Tip: Make sure to keep your palms facing forward, back straight, and do not shrug your shoulder during the exercise.

SEATED SHOULDER PRESS - 10 REPETITIONS, 2 SETS. LEFT, THEN RIGHT



Setup: Begin sitting upright in a chair.

Movement: Bring one arm out to your side, bent 90 degrees at the elbow, then punch up towards the ceiling by straightening your arm. Lower your arm to the bent position and repeat. You can hold a dumbbell or other weighted object in each hand. Palms face forward.

Tip: Make sure to keep your back straight and do not shrug your shoulders during the exercise.

RESISTANCE TRAINING:

UPRIGHT ROW - 10 REPETITIONS, 2 SETS.



Setup: Begin in a standing upright position holding an object or dumbbell in each hand.

Movement: Pull the weight upward, keeping your hands close to your body and bending your elbows until your hands are at your chest, then lower them back down and repeat.

Tip: Make sure to keep your back straight and do not shrug your shoulders during the exercise

SINGLE OVERHEAD TRICIPES EXTENSION - 10 REPETITIONS, 2 SETS. LEFT, THEN RIGHT



Setup: Begin in a standing upright position holding a dumbbell in one hand. Raise your arm straight upward with your elbow bent by your head, stabilized by your other hand.

Movement: Slowly straighten your arm up toward the ceiling, then lower it back down and repeat.

Tip: Make sure to keep your back straight and do not let your arm fall forward during the exercise.

RESISTANCE TRAINING:

SEATED SHOULDER ABDUCTION - 10 REPETITIONS, 2 SETS.

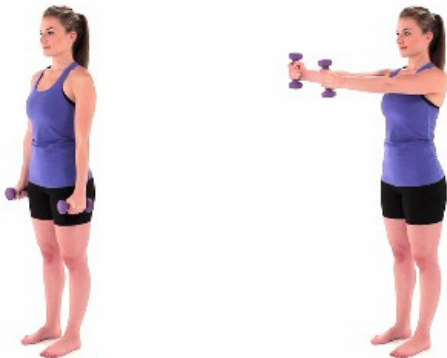


Setup: Begin sitting in an upright position with your arms resting at your sides. If you prefer, you can hold a dumbbell or other object in your hands. Palms face down.

Movement: Keeping your elbows straight, raise both arms directly out to your sides with your palms down, then lower them back down and repeat.

Tip: Make sure to keep your back straight and do not shrug your shoulders during the exercise.

STANDING SHOULDER FRONT RAISE - 10 REPETITIONS, 2 SETS.



Setup: Begin in a standing upright position holding a dumbbell in each hand.

Movement: Slowly raise your arms in front of your body, with your elbows straight and thumbs facing forward. Repeat this movement.

Tip: Make sure not to raise your arms above shoulder height, and try not to arch your back or shrug your shoulders during the exercise.

STRETCHING:



QUAD STRETCH

- Stand holding the wall.
- Bend one knee then bring your heel toward your buttock until you feel a stretch in the front of your thigh.
- Keep your knee pointed toward the floor.



CALF STRETCH

- Stand in front of a wall with one leg forward and one leg back, toes pointing forward.
- Keep your back straight and your heels on the ground, lean forward, bending the front knee until you feel a stretch in the calf of your back leg.



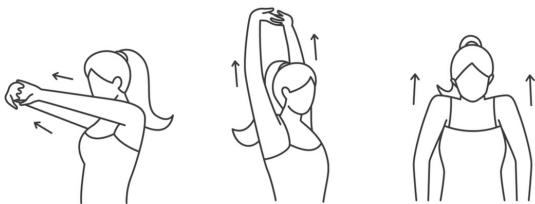
HAMSTRING STRETCH

- Stand with one foot extended as shown.
- Keeping your back straight, slowly lean forward, bending at the hips, until you feel a pull in the back of your thigh.
- Make sure you keep your front knee straight.



SIDE LEAN

- stand with good posture.
- Reach one arm up toward the ceiling and then toward the wall beside you
- allow your body to bend slightly as you lean to the side
- Come back up fully to center and repeat on the other side.



BACK STRETCH & SHOULDER SHRUGS

- Stand with your back straight and shoulders down.
- Lock fingers together, keep elbows straight and reach forward until you feel a stretch in the back.
- Raise arms overhead.
- Allow arms to fall by sides and shrug shoulders up and down.

TIPS:

- Move into each movement gradually until you feel a stretch but no pain.
- Hold each stretch 20-30 seconds. You can repeat 2-3 times for each stretch.
- Breathe normally. Do not hold your breath.
- Hold each position without bouncing or moving in and out of the position.

SAMPLE HOME WALKING PROGRAM

	WARMUP	ACTIVITY	COOL DOWN	TOTAL TIME
Week 1 2x week	5 min. Walk Slowly	5 min. Walk Briskly	5 min. Walk Slowly	15 minutes
Week 2 2x a week	5 min. Walk Slowly	7 min. Walk Briskly	5 min. Walk Slowly	17 minutes
Week 3 3x a week	5 min. walk Slowly	8 min. Walk Briskly	5 min. walk Slowly	18 minutes
Week 4 3x a week	5 min. Walk Slowly	9 min. Walk Briskly	5 min. Walk Slowly	19 minutes
Week 5 3x a week	5 min. Walk Slowly	10 min. Walk Briskly	5 min. Walk Slowly	20 minutes
Week 6 3x a week	5 min. Walk Slowly	12 min. Walk Briskly	5 min. Walk Slowly	22 minutes

WALKING TIPS:

1. BEGIN EACH WORKOUT SLOWLY

Allow a 5-minute WARM-UP period. This wakes up your muscles and gets them ready for activity.

2. LISTEN TO YOUR BODY

You should be able to walk and talk while exercising. You are going too fast if you can not complete a sentence. If you experience muscle tightness, take an extra day off to rest. Select good walking shoes.

3. PAY ATTENTION TO WARNING SIGNS

STOP exercising if you feel dizzy, feel like fainting, are unable to catch your breath or experience pain/pressure in your chest during or after the exercise. Call your physician immediately and do not engage in physical activity until you are cleared to do so.

4. CHECK THE WEATHER

Ohio weather can be very hot or very cold. On hot humid days, exercise early in the morning or late in the evening. Wear light, loose-fitting clothing and drink 8-12 oz. of water before, during and after exercising. On cold days, dress in layers. The first layer of clothing (closest to your skin) should wick away moisture from your body. Also, don't forget your hat and gloves.

EXERCISE DIARY

NAME:

WEEK OF:

DATE							
WEIGHT							
RESTING HR							
BP							
EXERCISE HR							
FINAL HR							
RPE							
NOTES							

HOW TO USE THIS DIARY:

Use this diary to record information you can share with staff as needed.

Try to weigh yourself at the same time each day.

Your resting heart rate should be taken while seated for a few minutes prior to exercise.

Blood pressure should be taken while seated, without crossing the legs.

Exercise heart rate is your heart rate during or just after exercise.

final heart rate should be taken after sitting and resting for two to three minutes after exercising.

RPE is your "rate of perceived exertion" - or, "how hard you feel like you worked" during exercise.

Refer to page 5, "The Talk Test" image to rate your level of exercise.

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Blood pressure should be taken while seated, without crossing the legs.

Exercise heart rate is your heart rate during or just after exercise.

final heart rate should be taken after sitting and resting for two to three minutes after exercising.

RPE is your "rate of perceived exertion" - or, "how hard you feel like you worked" during exercise.

Refer to page 5, "The Talk Test" image to rate your level of exercise.

THANK YOU FOR CHOOSING ADHVH

As we work at a limited capacity,
we appreciate everyone's patience
and understanding.

Remember to always stay safe.

Section 2: Patient Onboarding

This section contains examples of policies and materials HYCR programs use to orient patients to HYCR. The contributor is identified for each resource.

2a: Ann & Robert H. Lurie Children's Hospital of Chicago Information Sheet: Cardiac Rehab at Home

Melissa McMahon, MS, ACSMEP-C, Manager, Cardiopulmonary Labs, Ann and Robert H Lurie Children's Hospital of Chicago

Safety Protocols

- Take rest breaks as needed during the session, please let your Exercise Physiologist know if you need a break
- If you become symptomatic, inform your Exercise Physiologist and stop exercise
 - Symptoms include chest pain, palpitations extreme shortness of breath, dizziness, lightheadedness, feeling faint, nauseous, extreme fatigue and muscle pain
- If symptoms persist, inform your parent or guardian. If they are not improving after the exercise session, call your cardiology team at 312-227-4100

If symptoms escalate or become worse, call 9-1-1

How to Prepare for Exercise at Home

- **Food and water** – Prior to the session, make sure you have had something light to eat and water to drink. It is recommended you have water available throughout the session.
- **Medications** – It is recommended you take all medications as prescribed unless otherwise notified by your care team.
- **Supervision** – Make sure your parent or guardian is available at home. They will need to check in with the Exercise Physiologist at the start of the session and readily available throughout the session.
- **Exercise space** – Make sure your exercise space is safe. Clear any furniture or items out of the way so you have space to move freely.
- **Telemedicine set up** – Have your tablet or computer ready, with the charger available.
- **Phone** – Have cell phone nearby as you take part in exercise, ready in case of emergency.
- **Monitor equipment** – If you have equipment to monitor your heart rate, oxygen saturations or blood pressure, have it available for each session.
- **Diabetic equipment** – If you are diabetic, have your glucometer and testing equipment available. Blood sugar will need to be checked at the beginning of the session.

- **Exercise equipment** – If you have exercise equipment at home, have it available to use. Please use exercise equipment with caution and according to the manufacturer's guidelines.
- **Attire** – Wear exercise clothing and gym shoes for the exercise session.

Session Format: Session Duration May Range From 30-60 Minutes

- **Introduction and baseline vitals** – At the start of the exercise session, we will talk with you and supervising parent or guardian to go over the day's session and review medications. Baseline vitals will be obtained. Depending on the monitoring equipment available, we will have you check your heart rate, oxygen saturation and blood pressure.
- **Warm up** – Dynamic exercises that allow for the body to prepare and adapt to exercise.
- **Aerobic exercise** – Exercise that focuses on improving cardiorespiratory response. Exercises will increase your heart rate for a prolonged period. Exercises may include walking, biking, elliptical, etc.
- **Resistance exercise** – Exercise that focuses on improving muscular strength. Patient will be guided through exercises by the Exercise Physiologist. Exercise equipment that could be used for this may include hand weights, resistance bands, sport balls, stability ball, etc.
- **Cool down** – Dynamic exercises that allow for the body to recover from exercise.
- **Conclusion and recovery vitals** – At the end of the session, we will discuss the next session's plan and obtain final set of vitals.

Patient/family was educated on exercise safety, identification of important signs and symptoms that warrant exercise termination and criteria for seeking immediate medical attention.

Patient/family was informed of the general low risk of injury that can occur while using exercise equipment (aerobic and strength) and that all accidental injuries would be virtually assessed by the physiologist or supervising provider with medical guidance provided. Patient/family understands that participation in home-based program sessions are voluntary and elective. Patient/family verbalized their understanding that mishandling of exercise equipment in the home may result in accidental injury that is not of fault to Lurie Children's program or virtual based exercise session.



Call the Exercise Lab for questions or information at 312-227-3745.

2b: Initial 1-to-1 Introductory Session: Sample Outline

Contributor: Javier Loureiro Diaz, ACSM-CEP, enior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

1. Introduce yourself.
2. Ask about the patient's current status
 - Symptoms
 - Physical activity pattern (IPAQ)
3. Initial Explanation of the Program
4. Program contact:
 - If you lose connection call this number:
 1. QRI exercise room: 402 60671
 2. QRI nurses station: 402 60331
5. Using VSEE:
 - How to Log in (SMS or email) – installation only this first time
 - The Waiting Room
 - Check In Process (15min before the start of class patient must be online)
 - Check Out Process (do not exit app after the class if not cleared by nurse)
 - Exiting the app
 - Address Privacy concerns: it is a group session but only us can hear and see the patient.
 - Reminder: links to access (SMS or email)
 - Reminder: SMS autogenerated by CERNER for their appointment, ignore location
6. Explanation of the Exercise Component
 - Warm Up and Cool down
 - Exercise Circuit
 - RPE scale
7. Exercise Equipment:
 - Shoes and clothing
 - Towel and water
8. Analysis of Exercise Area
 - Exercise Area: Where does the patient intend to exercise?

1. Room is quiet and private, also advise to check their volume settings if needed
 2. Safety (clear of furniture).
 3. Lighting
 4. Temperature (regulate AC)
 5. Chair
 6. Wall
 - Placement of the smartphone/laptop device so we can see him clearly
9. Clinical Considerations:
- Medications: keep those needed (i.e GTN spray, inhalers,..) on the table close by the device.
 - For Hypertensive patients:
 1. Do they have a BP monitor at home?
 - For Diabetic patients:
 1. Do they have a glucometer at home?
 2. Are they on insulin: if yes how is dose regulated according to:
 1. time of exercise
 2. injection site
10. Emergency Procedures
- Technical Difficulties (Connection Lost or Feed Freeze)
 - What to do in a non-critical Emergency
 - In the case Home Address details not available, patient can find this out on the following government links:
 1. Arabic address Finder:
<https://geoportal.gisqatar.org.qa/qmap/index.html>
 2. English address Finder:
<https://geoportal.gisqatar.org.qa/qmape/index.html>
11. Email Communication basics (if appropriate)
12. Solve any questions or concerns the patient may still, and ask for consent to participate
13. Agree to starting date and time



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

2c: Phase 2 Patient Calls Script

Contributor::Ashley Eckroate, BSEP, TTS, CCRP, Cardiopulmonary Rehabilitation Exercise Leader, Aultman Deuble Heart and Vascular Hospital

Patient Answers:

Hi, this is (name) from Aultman (site) Cardiac Rehab. May I please speak with (patient name)?

I am calling regarding an order written by (Dr. _____) for you to complete our Cardiac Rehab program, following your (procedure (stents, CABG, Valve, etc.)) on (date of procedure).

While you were in the hospital, did anyone get a chance to talk to you about Cardiac Rehab?

Cardiac Rehab is a monitored exercise and education program where you would attend 3 times/week for 12 weeks.

I would be happy to help you set up your initial assessment at this time. We complete our initial assessments on (_____ & _____ days). Which would work best for you?

Other Questions and Notes

If they sign up:

Insurance: If you have any questions about insurance coverage, please contact your insurance provider and ask about coverage for "Phase 2 Cardiac Rehab."

Benefits: Strengthen your heart through a prescribed exercise plan with week-to-week progressions.

- Education on diet, cardiac risk factors and heart health

Order written by Fellow: if the order is written by a fellow, you can mention his/her name and say it is standard practice for them to write the order for their Cardiologist.

Voicemail

Hi, this is (name) from Aultman (site) Cardiac Rehab. This message is for (patients first name).

I am calling regarding an order for you to complete our Cardiac Rehab program.

Cardiac Rehab is a monitored exercise and education program where you would attend 3 times/week for 12 weeks.

If you could kindly return our call at (site phone #), we would be happy to help set up your initial assessment. Thank you.

2d: Physical Activity Counseling for HYCR Participating Patients—Sample Outline

Contributor: Javier Loureiro Diaz, ACSM-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

1. Identify myself
2. Explain to the patient the reason for this call: state objectives and outline of PA counselling
3. Explore patient's current situation:
 - "Can you tell me a little bit about in which ways you are staying active at home?"
 - Quantify IPAQ: How much activity: days and minutes per day as well as intensity (light/moderate/vigorous)
 - Describe the form or mode of activity.
 - Does he have exercise equipment at home? YES / NO, what equipment? If YES explore if use of equipment is correct or maximize and advice as possible based on the Exercise Card.
 - How much sedentary time: typically remind him/her of importance of breaking sedentary time.
4. Patient perceptions:
 - What does he think about his current levels of activity? Are they enough?
5. Counselling:
 - If ACTIVE:
 1. "That is great...and How are you feeling about it?" Generate change talk, assess consistency, motivation, future potential issues, etc.
 - If NOT ACTIVE:
 1. Explore barriers: motivational vs practical (i.e., lack of equipment)
 2. What is stopping him/her from being active?
 3. What things/ways does the patient think could help him/her start or increase his/her exercise levels?
 4. Explore his awareness of consequences of Inactivity for his/her Cardiovascular Health
 5. Work and explore with patient towards 5W of Exercising at Home:
 - a. Why should he/her Exercise?
 - b. What Exercise can he/she do?
 - c. When to Exercise?
 - d. Where to Exercise?

- e. Who can help him/her exercise?
 6. Explore readiness: regarding the 5W plan above: is the patient ready to commit to an immediate Action Step (i.e., working out that same day or next)
 7. Is it possible to get him/her to generate a short term weekly SMART goal? (i.e., To exercise 2 times a week for 45 min at moderate intensity following the Cardiac Rehab Video).
 8. Record this goal on the Progress Note so whoever counsels him/her next can refer back to it
6. Remind patient of basic precautions and considerations
 - o Monitor Signs and Symptoms
 - o Warm up ad cool down
 - o Manage own intensity
 - o Adherence to medications
 - o Refraining from smoking
 7. Follow-Up: When will we call the patient in 2 weeks? Record on the progress note.
 8. Document Counseling / Assessment notes on Cerner

Section 3: Conducting a Session

This section presents methods used by CR programs to conduct a HYCR session. Each contributor is highlighted.

3a: Cardiac Rehab Toolkit

Contributor: Alexis Beatty, MD, Director, USCF MD/Masters in Advanced Studies Program

This toolkit contains several resources for implementing a HYCR program.

[Cardiac Rehab Toolkit | Alexis Beatty Research \(ucsf.edu\)](#)

3b: Running a Cardiac Rehab Virtual Session

Contributor: Ashley Eckroate, BSEP, TTS, CCRP, Cardiopulmonary Rehabilitation Exercise Leader, Aultman Deuble Heart and Vascular Hospital

15 Minutes Before Class Time

- Pull up Virtual Participation list on Sharepoint so phone/addresses are available in case of emergency. As patients enroll in virtual rehab at each site, they MUST be added to this list with all columns filled in.
- Log into Aultman Now: aultman.amwellnow.com
- Send text or email link to patients.
- As they log on, Bring patients up as non-monitored on Scottcare.
Include in session comment:
 - Their Consent to Virtual Cardiac Rehab via AultmanNow
 - Physician supervising: Dr. Podugu
 - Education:
- Scottcare can remain running as “rest” and session report can be adjusted after class as demonstrated in Session report sample at the end. Nurses must sign off on session report.
- Greet the patient and let them know you’ll be muting them, that you will unmute them from your side when you need them to respond. If they have questions there will be time at the end.
 - **Initially state everyone must give verbal consent to participate in virtual rehab.** Note this consent in the comment section of session. (see sample session report)
We cannot refer to it as “telehealth”
- Next, state:
“If you have been having any new issues such as SOB, CP, or weight gain of 1 lb in 24 hrs or 3 lbs in one week or anything else out of the ordinary, please exit the session now and we will call you on the phone to discuss.”
- **Remind them:** If they start experiencing symptoms to hold two hands up to the screen to get the attention of staff.
- Call on them one by one and unmute them manually to gather vitals/data:
 - Do you consent to virtual rehab?
 - Resting HR.

- If they have BP cuff and know their BP and would like to share that have them tell you.
- This can be entered into Scottcare.

Education

At class time, begin with education. Spend 10 minutes on Education.

Warmup/Workout

(Aerobic about 12 minutes. Spend 45 seconds on each movement) Discuss RPE scale during warm up and give patients suggestions to increase or decrease intensity as required.

- Small marches in place
- step in/step out
- higher knee steps
- step and reach
- modified jacks
- step and reach
- half squats
- half squats with reach up
- step and reach
- march in place adding jogging arms
- step and reach
- modified jacks
- butt kicks with arms pressing out front (alternating)
- march in place with jogging arms
- step and reach
- modified jacks
- butt kicks/pressout
- slow march to cool down

During cardio section gather RPE and HR (if possible). Have them refer to their guidebooks for the Talk Test RPE scale.

Strength

- 10 minutes following the exercises in the guidebook.
- Have patients sit and gather their equipment: bottles of water, dumbbells or resistance bands.
- Lead through the weights section in guidebook, showing modifications with bands if needed.

Stretches

- 5 minutes. These can be the stretches we have been doing.
- Lead patients through guided stretches and deep breathing.
- Let patients know that we are available to answer questions after class via phone. Give phone number. Disconnect.
- ***Let patients who need ITP updates know they will be getting a call in the next 15 minutes to discuss.***

After Classes Have Ended

- Add patients to Virtual attendance spreadsheet at each site.
 - Adjust session report accordingly after they have been removed from unmonitored sessions prior to sending the report. *see sample session report”
- Nurses must sign off on Virtual Session reports.
- Follow up with any ITP calls that need made or any patient calls after the session has ended.
- Complete and Send ITP updates.

Home Based Safety Procedure

- Patients have been notified in their guidebook to stop exercising immediately if they become symptomatic and to hold two hands up to the screen to alert staff that they need assistance.
- At this time, we could let the patient know we have seen them and that a nurse will be contacting them immediately.
- A nurse should call the patient at the phone number listed on patient information sheet on SharePoint.
- If a patient is using their phone for AultmanNow it will automatically disconnect them. Otherwise, the nurse will instruct patient to disconnect from Aultman now after she has them on the phone.
- The nurse will make a clinical judgement after assessing the patient based on our existing policy and procedures.
- The nurse will decide either to contact the patient’s physician or to call 911 on behalf of the patient.
- If 911 has been contacted, call Dr. Podugu via Facetime to relay the issue.

3c: Online CR: Check In Process

Contributor: Javier Loureiro Diaz, ACMS-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

1. Introduce yourself to the patient
2. Ask about the absence of symptoms since last exercise session / previous days:
 - If symptomatic determine if patient suitable for Exercising on the day or does he need further clearance →
3. Ask about compliance with medication prior to the session:
 - If taken, ok to proceed with class.
 - If prescribed, remind patient to have immediate available GTN and inhalers. Ideally set those down by the device / laptop used to stream the class.
 - If not taken, politely explain they are not permitted to enter this class, and will have to attend the next session.
 - Repeated poor medication compliance referred to Pharmacist + on hold from virtual class
4. Ask about BP and BG levels since last session / previous days for those patients identified as needing closer monitoring
 - If diabetic, remind patient to have immediately available glucose tablets or other sugary snack. Ideally by the PC / laptop used to stream the class.
5. Regarding Smoking habit:
 - If patient is an identified Smoker: briefly ask about smoking habit, and advise refraining from smoking pre-exercise (2h)
 - If patient is identified as having stopped recently: ask how he is doing and reinforce behavior change
6. Ask if the patient has prepared himself for the session appropriately:
 - space: safe, temperature
 - sport clothes and footwear,
 - water and towel by the chair
7. Remind him/her of the emergency procedures in case of emergency:
 - to stop exercise immediately in the occasion of any chest pain, dizziness or severe shortness of breath,
 - get instructors attention by waving and sitting by the device
 - wait for the nurse will call them on their phone

8. Is there any other outstanding issue that may need consultation with other specialty: dietitian, OT, pharmacist?
 - If needed arrange for a Virtual Appointment on behalf of the patient.
9. Ask for verbal consent to participate: make sure he understand all the above, and the risks and benefits associated to exercise participation.
10. Finish VSee call and tag patient accordingly:
 - As "Checked In" AND one of the following options:
 1. "Ready for class" - If all ok
 2. "For Exercise Team Review" – will mean that only after exercise Team review the patient will be tagged as ready for class
 3. "For Nurses Review" – (i.e., during check in process bp is high, nurses ask the patient to rest and take again in 5min while she checks in other patients, she will later review this patient again)
 4. "Not Suitable for Exercise" - there is a contraindication to join on the day
 5. "Tech Issue"
11. Document on CERNER (suggested to create a standard copy/paste as per above list, plus add any outstanding details. Include "Verbal consent gained for the group video exercise session and patient provided digital consent via the VSee platform before commencing the call".

3d: Online CR: Check Out Process

Contributor: Javier Loureiro Diaz, ACMS-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

1. Has the patient managed to perform an effective Cool-Down?
2. Any symptoms or problems during or after the exercise class?
3. If applicable BP / BG measurements
4. Thank him/her for the effort and reminder to stay active
5. Finish VSee call and tag patient accordingly:
 1. "Checked Out"
 2. "For Exercise Team Review" – will mean that exercise Team should review to complete the check out process
 3. "For Nurses Review"
6. All of the above to be reflected on the CERNER documentation

3e: Leading the Online Group Exercise Session

Contributor: Javier Loureiro Diaz, ACMS-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/Qatar Rehabilitation Institute

1. Introduce yourself
2. Introduce the class (duration 50min: Warm Up 10min, Circuit Round 1 14min, 2 min break, Circuit Round 2, Cool Down 10min)
3. Brief reminder for Safe Environment:
 - Device plugged in
 - Patient's camera is on focus to exercise area,
 - Sound check, they can hear you loud and clear
 - Wall and Chair nearby, together with the Water and Towel
 - Room temperature (regulate AC if possible)
4. Safety procedure reminder:
 - In the event of screen freeze: continue moving
 - In the event of any complication: Raise your hand, exit to the virtual waiting room, Nurse will come in to talk to you 1:1
 - Brief reminder of RPE scale, and how to exercise within own limits.
5. Start Class:
 - 10min: Warm-Up
 - 14min: Circuit Round 1 (8 exercises, 90 sec each, 30 sec active rest in-between)
 - 2min: Active Recovery (Reminder of RPE scale, ask patients to self-asses the level of exertion, do they need to adjust their intensity?)
 - 14min: Circuit Round 2 (8 exercises, 90 sec each, 30 sec active rest in-between)
 - Cool-Down
6. Feedback: address patient by first name
7. Final round up
 - How did it feel, was it on a good level of effort for you?
 - Any issues with equipment or room set-up?
 - Any adaptations needed for next class?
 - Session RPE
 - Brief reminder of Exercise Diary, and that he should record date, RPE after 1st round, RPE after 2nd round, Overall RPE of the class
8. Dismiss class for check out
9. Advise those interested may wait for relaxation session starting after (15min, not mandatory)



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

3f: Wellstar Kennestone Cardiac Rehab Book of Band Exercises

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary

Rehab See the following 27 pages.

**BOOK OF BAND
EXERCISES**

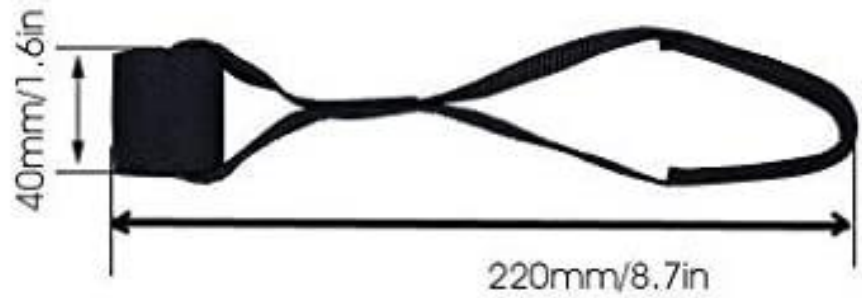
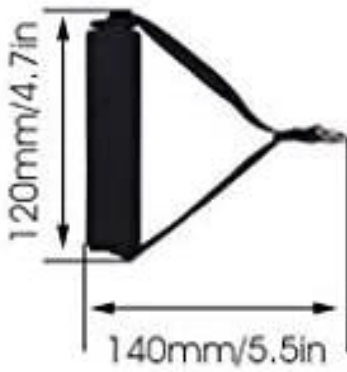
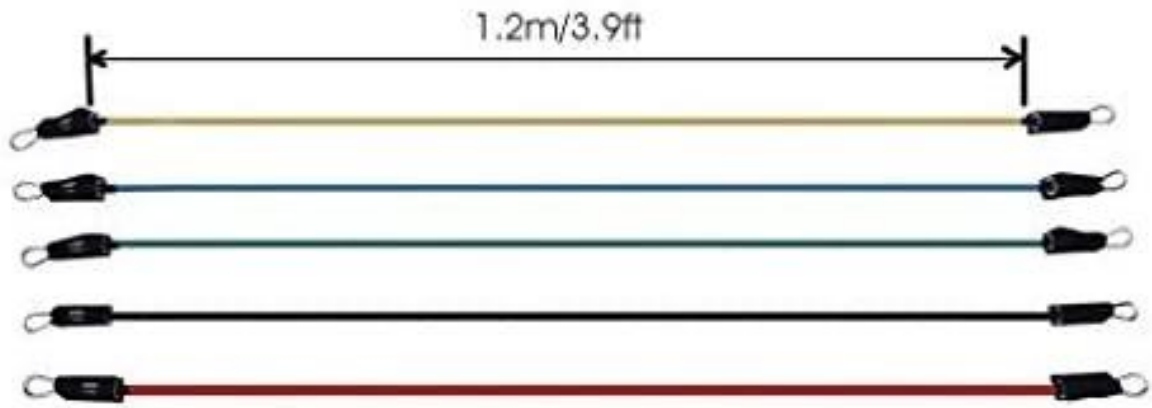
**WELLSTAR KENNESTONE
CARDIAC REHAB**





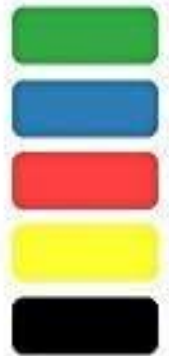
Five different bands up to **100 LBS**, 5 bands can be used alone or stacked in any combination of intensity from 10 lbs to 100 lbs Which is different from barbells and weight machines, Each band is 48 inches in length and marked with its different weight as below perfect for all whether beginners or expert, boys or girls, men, women or children.





1.2M Pull Rope

High Elasticity, ECO Friendly Rubber Band, Tension



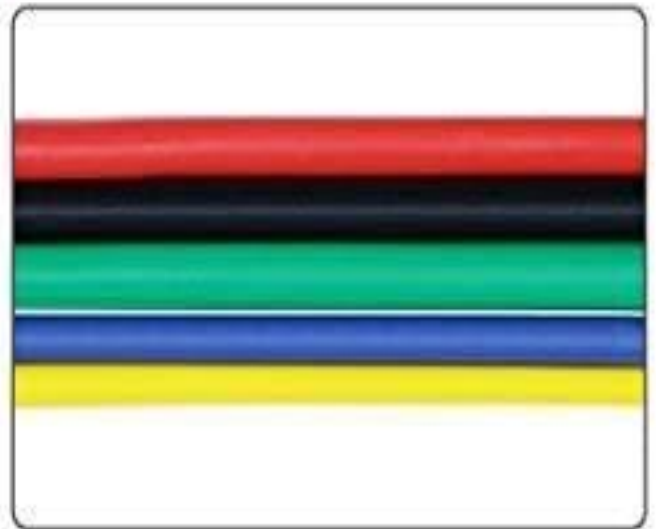


← Metal Carabiner



← Ankle Strap

Latex Tube →



Thicken Safety Door Lock

Inner Core: TEFLON

Outside TRP Cushion, Protect Doorsill



These leg exercises require good balance and if you're unsure of your balance, PLEASE USE A CHAIR AS SUPPORT to keep your balance as you do these exercises. Number one is BE SAFE!

Standing Leg Abduction With Tube Bands

Area Targeted: Outer Thigh

Standing Leg Abduction With Tube Bands targets the stubborn problem area of the Outer Thigh. Strengthen your Abductors by working them against the smoothest, safest and most effective resistance on the planet - Bands! You will be shocked at how bad this exercise burns and how well it works.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the bands to one ankle strap.

Body Positioning: Wrap the ankle strap around the ankle of your active leg. Stand 3 to 4 feet away from the door with your non-active leg closest to the door, and a couple of inches behind your active leg. Position a chair so that you can use it for stability. Keep your back straight, head straight, chest up and stomach tight.

MOVEMENT

Pull your active leg out to the side until it creates a 45 degree angle with the floor.

POINTS TO REMEMBER

1. Keep your active leg straight throughout the range of motion.
2. Visualize pulling the resistance from your heel.

Standing Leg Adduction With Tube Bands

Area Targeted: Inner Thigh

Standing Leg Adduction With Tube Bands targets the stubborn problem area of the Inner Thigh. Strengthen your Adductors by working them against the smoothest, safest and most effective resistance on the planet - Bands! The burn is incredible and so are the results that follow.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the elastic(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the elastic to one ankle strap.

Body Positioning: Wrap the ankle strap around the ankle of your active leg. Stand 3 to 4 feet away from the door with your active leg closest to the door. If needed, position a chair so that you can use it for stability. Keep your back straight, head straight, chest up and stomach tight. Start with your active leg at a 45 degree angle with the floor.

MOVEMENT

Pull your active leg in (away from the anchor point) until your active foot is in front of your stationary foot.

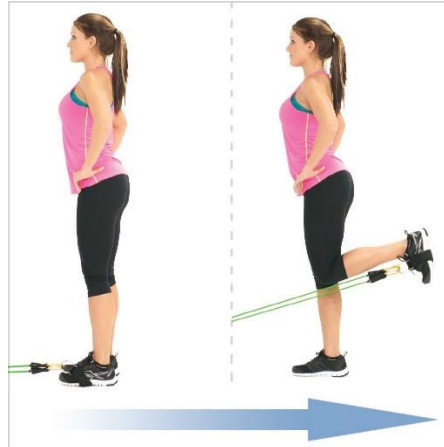
POINTS TO REMEMBER

1. Keep your active leg straight throughout the range of motion.
2. Visualize pulling the resistance from your heel.

Standing Hamstrings Curl With Tube Bands

Area Targeted: Hamstrings

Standing Hamstrings Curl With Tube Bands is one of the best Hamstrings exercises that you can do anywhere! You will be amazed at how hard your Hamstrings Muscles contract as you perform each rep. Many find this exercise better than lying hamstrings curl because they are able to keep their hips from moving during the reps.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the band to one ankle strap.

Body Positioning: Attach the ankle strap around one foot (with the ring on the top of your foot). Stand 3 to 4 feet away from the door, facing the door. Move far enough away from the door so that the band(s) start to stretch. Stand up tall with your Back straight, Head straight and Chest up. Place your hands on your hips or use a stationary object for balance.

MOVEMENT

Bend your active leg (up and back) until your calf is parallel with the floor. Return your active leg to starting position. Repeat.

POINTS TO REMEMBER

1. Keep your chest up and back straight throughout the movement
2. Keep your knees together, do not move your active knee forward or back as you bend your leg

Standing Knee Raise With Tube Bands

Area Targeted: Hip Flexor

Your hip Flexors need to be strong! That's why you need to do the Standing Knee Raise With Tube Bands. This exercise is amazing for working each set of your hip flexors one at a time. Remember that strained hip flexors can wreak havoc, so be sure to use lower resistance and do controlled higher reps.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the band(s) to one ankle strap.

Body Positioning: Secure the ankle strap around your active ankle and stand 3 to 4 feet away from the door with your back to the door. Position your body with your active leg back and far enough away from the door so that the band(s) are starting to stretch. Keep your back straight, chest up, head straight and stomach tight.

MOVEMENT

Bring your active leg up and forward until your knee is at hip height.

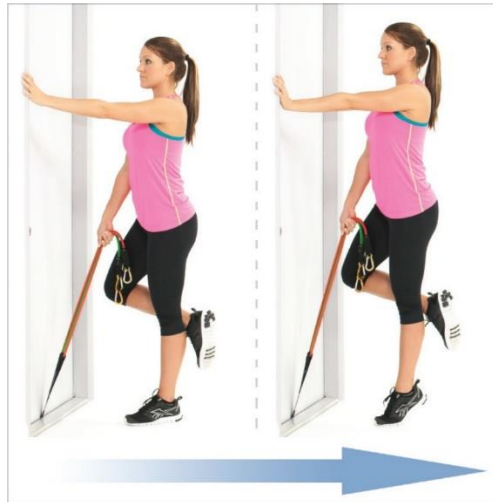
POINTS TO REMEMBER

1. As you raise your knee try to keep your foot forward so that your lower leg remains perpendicular with the floor.

Standing One Legged Calf Raise With Tube Bands

Area Targeted: Calves

Standing One Legged Calf Raise With Tube Bands is a great alternative exercise to the Two Legged Standing Calf Raise. Sometimes it can be beneficial to work the muscles, one arm or leg at a time. You will be shocked at how well this exercise works each calf muscle individually.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: No adjustment required

Body Positioning: Now while facing the door, bend down and grip both sides of the band(s) with one hand so that when you stand up straight, the band is starting to stretch. Place your free hand straight out in front of you against the door and your inactive foot behind your active calf. Keep your head straight, back straight and chest up.

MOVEMENT

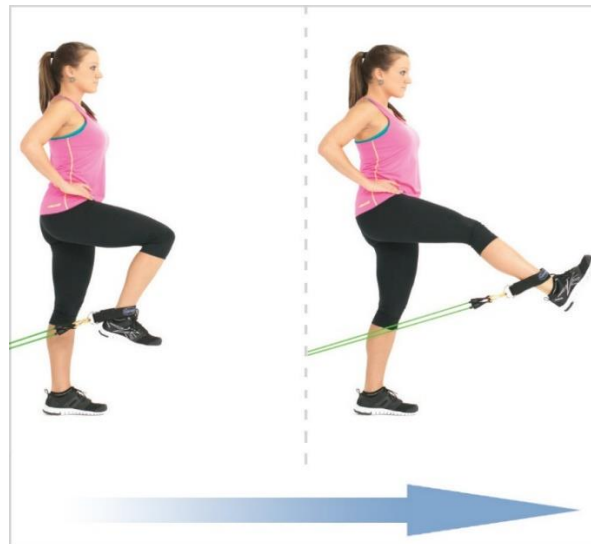
Raise your heel off the floor, and stand up as high as possible on your toes.

POINTS TO REMEMBER

1. Try to place the majority of the pressure on your foot, on your big toe.
2. Keep the arm that is holding the elastic, straight, pointed towards the door anchor.

Standing Leg Extension With Tube Bands

Area Targeted: Thigh & Hip Flexor



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the band to one ankle strap.

Body Positioning: Attach the ankle strap around one ankle (with the ring on the back of your ankle). Stand 3 to 4 feet away from the door, with your back to the door. Move far enough away from the door so that the band starts to stretch. Raise your active leg up until your thigh is parallel, and calf is perpendicular to the floor. Adjust your active leg so that your knee cap is pointing straight up. Place your hands on your hips or use a stationary object for balance. Stand up tall with your back straight, head straight and chest up.

MOVEMENT

Straighten your active leg out in front of you until your knee is almost totally straight.

POINTS TO REMEMBER

1. Keep your thigh up, parallel with the floor throughout the movement.

Biceps Curls With Resistance Bands

Area Targeted: Biceps

Biceps Curls With Resistance Bands take a classic exercise to all new levels. Sure, Biceps Curls With Dumbbells are good. Band curls are better! Since bands provide more tension at the end of your reps you will get the right amount of resistance at the optimal time. Bigger guns ahead!



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Not required

Body Positioning: Stand on the band(s) hips width apart. Now take a handle in each hand and stand up straight. Keep your back straight, head straight, chest up and stomach tight. Start with your arms straight down with palms facing forward, and elbows tight to your sides.

MOVEMENT

Pull the handles up and bend your arms until your hands are at chest height.

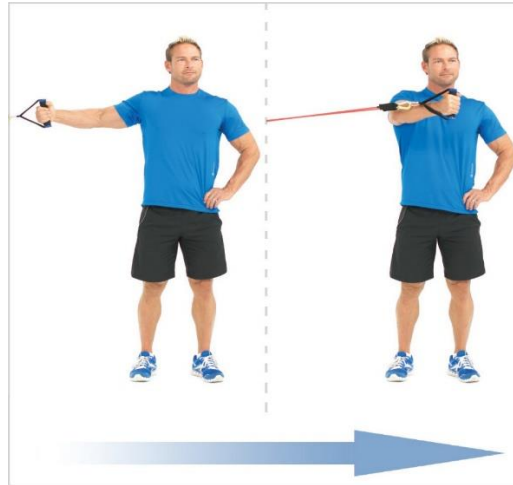
POINTS TO REMEMBER

1. Keep your elbows stationary at your sides, do not let them move forward and back during the movement.

Standing Chest Fly (Mid) With Tube Bands

Area Targeted: Middle Chest

The Standing Chest Fly From A Mid Anchor Point is a classic exercise to target the Pecs (Chest Muscles). It works so well because it places super smooth linear progressive resistance against the exact function of the Chest Muscles. Forget the cable machines! This exercise is so much better, and safer!



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at chest height.

Bands: Loop one handle of the band through the door anchor so one end of the band is secured to the door anchor and grip the handle with one hand.

Body Positioning: Stand 3 to 4 feet away from the door with your active side facing the door. Position your arm so that it is pointing towards the door anchor and has a slight bend. Your palm should be facing forward. Keep your back straight, head straight, chest up and feet shoulder width apart.

MOVEMENT

Pull the handle(s) around until your arm is right in front of your chest.

POINTS TO REMEMBER

1. Keep your arm frozen with a slight bend in your elbow throughout the movement.
2. Keep your shoulders square, do not rotate your upper body as you pull the handle(s).

Standing One Arm Back Row With Tube Bands

Area Targeted: Outer Back

If you have never felt your Lats working during a rowing exercise, you will now! Doing the Standing one Arm Back Row With Resistance Tube Bands isolates and works the Lats (Your V-Taper or Wing Back Muscles) like nothing else. Do this exercise multiple times a week Build incredible back strength and width FAST!



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at stomach height.

Bands: Loop one handle of the band through the door anchor so one end of the band is secured to the door anchor and grip the handle with one hand.

Body Positioning: Stand 3 to 4 feet away from the door while facing the door. Position your feet with a wide stance, bend your legs and keep your back and head straight. Start with your palm facing in and arm straight out in front of you (pointed towards the door anchor).

MOVEMENT

Pull the handle back until your elbow is right below your shoulder. Return to the starting position (controlling the resistance). Repeat.

POINTS TO REMEMBER

1. Keep your arm tight to your body (do not flare the elbows outward).
2. Try to keep your forearm parallel with the floor as you pull back.

Forward Triceps Extension

Area Targeted: Triceps

Forward Triceps Extensions is a great Back Of The Arms exercise to work into your routines to add extra variety and results. This one definitely works best with less resistance, since too much resistance will pull you back towards the door. However, don't be fooled! High reps and lower resistance with bands works ridiculously well.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at shoulder height.

Bands: Loop one handle of the band through the door anchor so one end of the band is secured to the door anchor and grip the handles with both hands.

Body Positioning: Grip a handle with each hand and stand about 3 feet from the door, with your back to the door. Stagger your legs, with one leg in front. Start with your upper arms up at parallel with the floor, with your hands close to your head at eye level, and palms facing forward.

MOVEMENT

Push the handles forward and straighten your arms.

POINTS TO REMEMBER

1. Keep your upper arms parallel with the floor throughout the movement.

Standing Shoulder Press With Tube Bands

Area Targeted:

Standing Shoulder Press With Resistance Tube Bands is a great and arguably better alternative to Dumbbell Shoulder Presses. Since Bands do not create momentum your reps with bands will not place wear and tear on the Spine and Joints. You can also train safely for speed with fast reps. These type of reps stimulate the Fast Twitch Muscle Fibers, which are the ones that grow!



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Not required

Body Positioning: Stagger your feet with one foot in front. Now stand on the band(s) with your front foot. Grip a handle in each hand and stand up straight. With the bands in front of your arms and palms facing forward, bring your arms up to goal post position (upper parallel, and forearms perpendicular with the floor). Keep your back straight, head straight and chest up.

MOVEMENT

Press your hands over your head and together until your arms are almost fully straight.

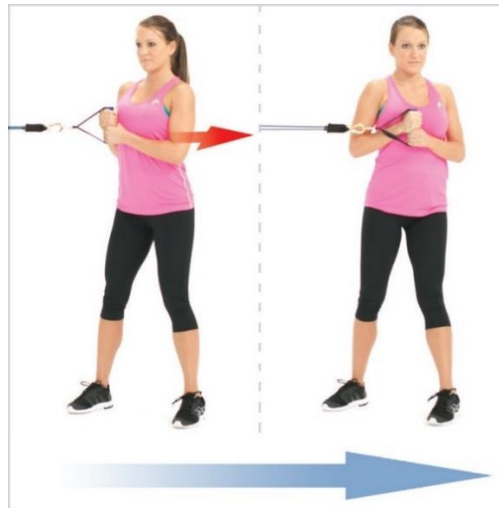
POINTS TO REMEMBER

1. Grip the handles lightly as you press your hands up.

Standing Abs Twist With Tube Bands

Area Targeted: Side Abs

If you are not doing Standing Abs Twist With Tube Bands, YOU NEED TO START! This exercise strengthens and mobilizes the core like nothing else. You know that pain and stiffness in your Back and Side Abs? This exercise helps open it all up and feel amazing. This one is a must.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at chest height.

Bands: Loop one handle of the band through the door anchor so one end of the band is secured to the door anchor and grip the handle with both hands.

Body Positioning: Stand about 3 to 4 feet away from the door, with your side facing the door. Keep your back straight, head straight and stomach tight. Position your arms in front of your body with your hands in tight to your chest.

MOVEMENT

Rotate your upper body (from your waist) away from the door and tension, until your body naturally stops. Return to the starting position (controlling the resistance). Repeat.

POINTS TO REMEMBER

1. Keep your lower body stationary as you rotate your upper body.

Reverse Biceps Curls With Resistance Bands

Area Targeted: Biceps

Reverse Biceps Curl With Resistance Bands is a great alternative to regular Biceps Curl. Turning your hands with Palms Facing Down elongates the Biceps and places more emphasis on your Forearm muscles. DEFINITELY mix this one in for a change.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Not required

Bands: Attach a handle to each end of the band(s).

Body Positioning: Stand on the band(s) hips width apart. Now take a handle in each hand and stand up straight. Keep your back straight, head straight, chest up and stomach tight. Start with your your arms straight down, tight to your sides and palms facing behind you.

MOVEMENT

Pull the handles up and bend your arms until your hands are at chest height.

POINTS TO REMEMBER

1. Keep your elbows stationary at your sides, do not let them move forward and back during the movement.

Standing Chest Press With Tube Bands

Area Targeted: Middle, Upper Chest

The Standing Chest Press With Tube Bands is a great exercise for working the Chest Muscles. Since the anchor is placed a little lower you will be able to anchor your body better as well as position the bands lower so that they do not rub against your arms. This exercise mimics a push up or Bench Press, so you know that you will see results.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at knee height

Bands: Attach each end of the band(s) to a handle

Body Positioning: Grip a handle in each hand, and stand 3 to 4 feet away from the door with your back to the door. Position your arms so that they are parallel with the floor, and parallel with the door behind you. Your palms should be facing down. Keep your back straight, head straight and chest up.

MOVEMENT

Push the handles forward, up and in until they about 6 inches apart, and at eye level. Return to the starting position (controlling the resistance). Repeat.

POINTS TO REMEMBER

1. Grip the handles lightly to insure that the majority of the stress is placed the chest muscles.
2. Do not bring your elbows past your shoulders as you bring them back to the starting position.

Standing Back Extension (Handle) With Tube Bands

Area Targeted: Middle Back (along Spine)



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the band(s) to one handle, and grip the handle with both hands.

Body Positioning: Stand with one foot forward 3 to 4 feet from the door while facing the door. To create the proper starting position bend forward from your waist and keep your back straight and flat. You should have a slight bend in your front leg and your arms should be straight pointed towards the door anchor.

MOVEMENT

Pull back and raise your upper body until you are standing up straight. Return to the starting position (controlling the resistance). Repeat.

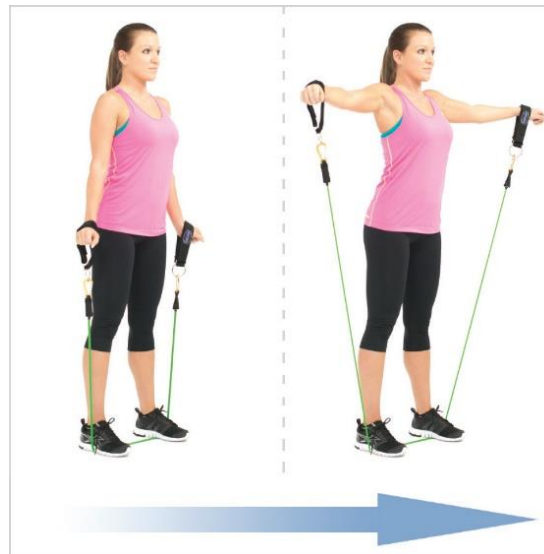
POINTS TO REMEMBER

1. Keep your hips stationary during the exercise, do not move them forwards and backwards.
2. Keep your arms straight, pointed towards the door anchor throughout the movement.

Standing Lateral Shoulder Raise With Tube Bands

Area Targeted: Side Shoulder

Can you get a better Side Shoulder Exercise than Standing Lateral Shoulder Raise with Tube Bands? We don't think so! This exercise isolates and works the Lateral Deltoids (Side Shoulder) without the momentum normally associated with free weights. You will work the muscle incredibly hard without the wear and tear on the joints.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Not required

Bands: Attach a handle to each end of the band(s).

Body Positioning: Stand on the band(s) hips width apart. Now grip a handle in each hand and stand up straight with your back straight, head straight, chest up, and stomach tight. Start with your arms slightly bent and palms facing in, at your sides.

MOVEMENT

Raise your arms straight out to the sides, until your elbows are at shoulder height. Return to the starting position (controlling the resistance). Repeat.

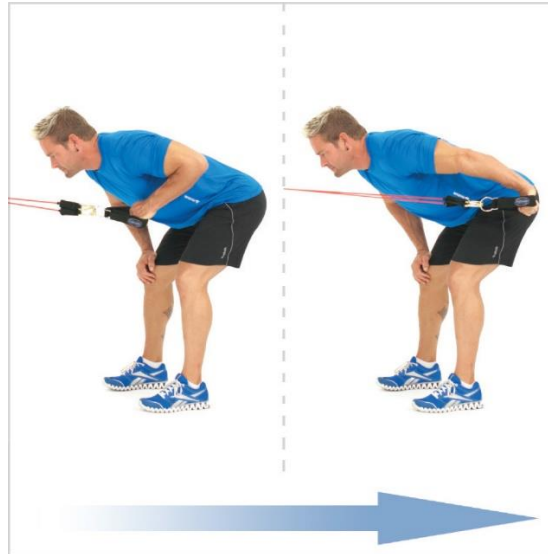
POINTS TO REMEMBER

1. Rotate your upper arm bone forward so that as you raise your arms out to the side, your elbows are higher than your hands.

Standing One Arm Triceps Kickback With Tube Bands

Area Targeted: Triceps

Standing One Arm Triceps Kickbacks will enable you to create an incredible pump in each arm separately. It is important to work your Arms and Legs individually to improve isolation of the muscles, and increase core strength and limb control.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at waist height.

Bands: Attach one closed ankle strap to both ends of the band(s) and grip the loop of the strap with the hand of your active arm. Your fingers should be inside the loop, and thumb on the outside.

Body Positioning: Bend forward at your waist so that your back is almost parallel with the floor. Position your active arm with your upper arm parallel with the floor, elbow tight to your side and hand right below your chest. Place your inactive hand on your knee.

MOVEMENT

Push your hand back until it is by your hip, and your arm is straight.

POINTS TO REMEMBER

1. Keep your upper arm parallel with the floor and elbow tight to your body throughout the movement.

Low-High Abs Chops With Tube Bands

Area Targeted: Side Abs

Hit your abs in a whole new way by doing Low High Chops With Tube Bands. This exercise is amazing for targeting and working your Transverse Abdominus (side Abs). After a few weeks of these twisting movements will become easier and you will feel more mobility with increased your range of motion in your core.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the bottom of the door.

Bands: Attach both ends of the band(s) to one handle, and grip the handle with both hands.

Body Positioning: Stand about 3 feet away from the door. Turn your body so that your side is facing the door. Keep your chest up, head straight and arms almost straight (elbows slightly bent). Get into the starting position by rotating and bending your body so that the handle is in front of the knee that is closest to the door.

MOVEMENT

Pull your hands up and across your body until they are at eye level. Return to the starting position (controlling the resistance). Repeat.

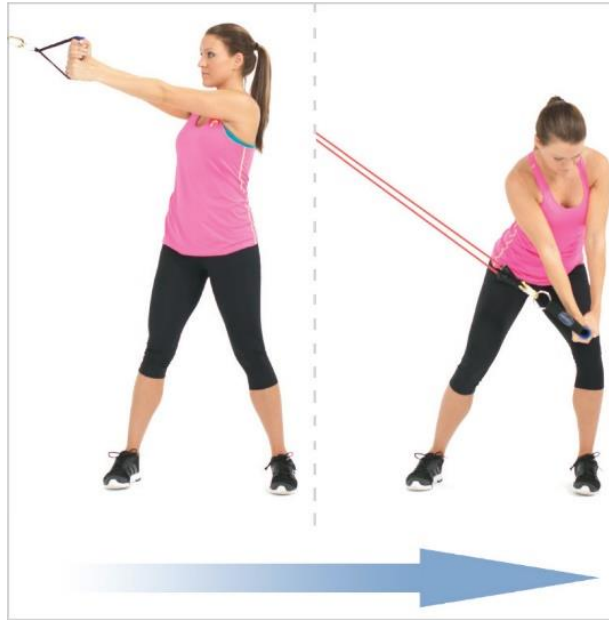
POINTS TO REMEMBER

1. Maintain only a slight bend in your arms, they should almost be straight.

High Low Chops With Tube Bands

Area Targeted: Side and Middle Abs

High Low Chops With Tube Bands is an amazing exercise for working the Rectus Abdominus (8 Pack) and Your Transverse Abdominus (Side Abs). Not only will you feel your Abs working with every rep, but you will feel more mobility with increased your range of motion in your core.



Instructions:

Follow the instructions below to perform this exercise:

SET UP

Anchor: Secure the band(s) to the door with the door anchor at the top of the door.

Bands: Attach both ends of the band(s) to one handle, and grip the handle with both hands.

Body Positioning: Stand about 2 feet away from the door. Turn your body so that your side is facing the door. Keep your chest up, head straight and arms almost straight (elbows slightly bent). Get into the starting position by rotating towards the door so that your arms are pointed up towards the door anchor.

MOVEMENT

Pull your hands down and across your body until they are by your outer leg, right above your knee. Return to the starting position (controlling the resistance). Repeat.

POINTS TO REMEMBER

1. Maintain only a slight bend in your arms (they should almost be straight).



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

3g: Wellstar Cardiac Rehabilitation Home Exercise Guide

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary

Rehab See the following 24 pages.

Cardiac Rehabilitation



Home Exercise Guide

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Stop Smoking 

Drink Less 


Reduce Stress 

Less Salt 

Strength Training 

Tips for a **HEALTHY HEART**

Good Sleep 

Less Fat 

Lower Blood Pressure 

Get Active 

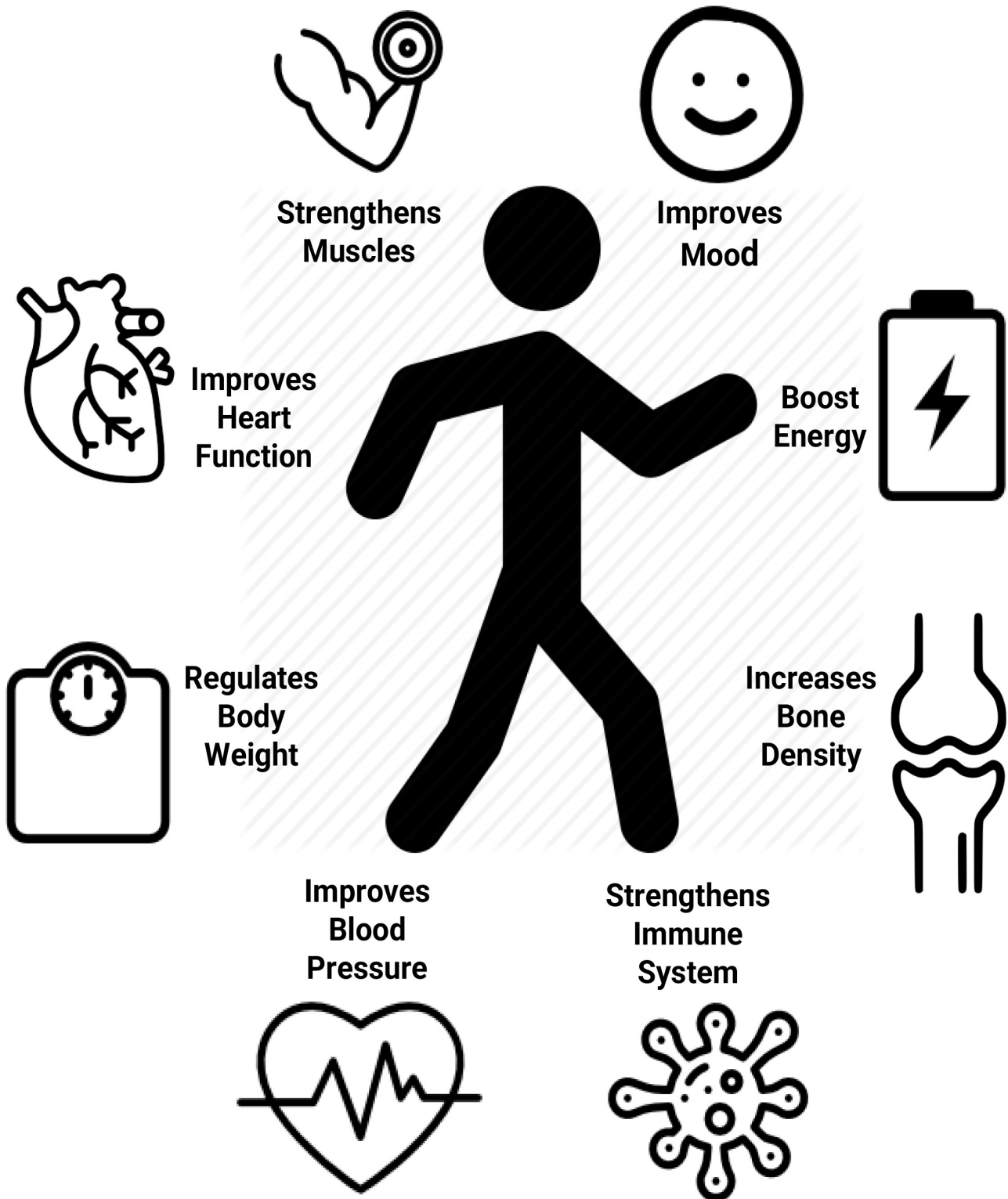
Lose Weight 

Recommended Types of Exercise



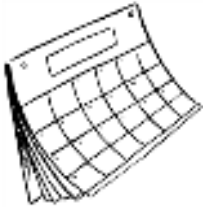
Endurance	Strength	Balance	Flexibility
<p>Aerobic exercise is designed to work the cardiovascular system, improving lung and heart health along with improving the condition of the musculoskeletal system.</p>	<p>Strength training is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance, and size of skeletal muscles.</p>	<p>Having good balance is important for many activities we do every day, such as walking and going up and down the stairs. Exercises that improve balance can help prevent falls as we age.</p>	<p>Flexibility exercises stretch your muscles and can help your body stay flexible. Being flexible gives you more freedom of movement for other exercise as well as for your everyday activities.</p>
<p>150 – 300 minutes a week</p>	<p>2 – 3 days a week</p>	<p>2 – 3 days a week</p>	<p>Everyday⁴</p>

Benefits of Exercise



F.I.T.T. Principle

Frequency, Intensity, Type, Time



Frequency: How often a person exercises per week



Intensity: How much exertion is best; use RPE Scale, Talk Test and THRR



Type: Activity performed; Walking, Cycling, Swimming, Dancing, Group Fitness Classes



Time: Refers to how long you exercise; 30 – 60 minutes or 150 – 300 minutes per week

Rating Perceived Exertion (RPE)

The **RPE scale** measures YOUR feelings of effort, strain, discomfort and/or fatigue experienced during both aerobic and strength training.

Rating	Exertion
6	No exertion
7	
8	
9	
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	
20	Maximal exertion



Aim to keep your **RPE** between **11 - 15**



If you feel your **RPE** is at 16 or above, **SLOW DOWN!**

Metabolic Equivalent of Task (MET) level



1 MET	1 to 2 METs	2 to 3 METs	3 to 4 METs	4 to 5 METs
<p>Home activities</p> <ul style="list-style-type: none"> • Bed rest • Sitting • Eating • Reading • Sewing • Watching TV <p>Occupational activities</p> <ul style="list-style-type: none"> • No activity allowed <p>Exercise</p> <ul style="list-style-type: none"> • No activity allowed 	<p>Home activities</p> <ul style="list-style-type: none"> • Dressing • Shaving • Brushing teeth • Washing dishes • Making bed • Desk work • Driving car • Playing cards • Knitting <p>Occupational activities</p> <ul style="list-style-type: none"> • Typing <p>Exercise</p> <ul style="list-style-type: none"> • Walking 1 mph on level ground 	<p>Home activities</p> <ul style="list-style-type: none"> • Tub bathing • Cooking • Waxing floor • Riding power lawn mower • Playing piano <p>Occupational activities</p> <ul style="list-style-type: none"> • Driving small truck • Using hand tools • Repairing car <p>Exercise</p> <ul style="list-style-type: none"> • Walking 2 mph • Bicycling 5 mph • Fishing • Golfing (with cart) 	<p>Home activities</p> <ul style="list-style-type: none"> • General housework • Cleaning windows • Light gardening • Pushing lawn mower • Sexual intercourse <p>Occupational activities</p> <ul style="list-style-type: none"> • Assembly-line work • Driving large truck • Bricklaying <p>Exercise</p> <ul style="list-style-type: none"> • Walking 3 mph • Bicycling 6 mph • Golfing 	<p>Home activities</p> <ul style="list-style-type: none"> • Heavy housework • Heavy gardening • Home repairs • Raking leaves <p>Occupational activities</p> <ul style="list-style-type: none"> • Painting • Masonry <p>Exercise</p> <ul style="list-style-type: none"> • Table tennis • Tennis (doubles) • Dancing • Slow swimming
5 to 6 METs	6 to 7 METs	7 to 8 METs	8 to 9 METs	10 + METs
<p>Home activities</p> <ul style="list-style-type: none"> • Sawing soft wood • Digging garden • Shoveling light loads <p>Occupational activities</p> <ul style="list-style-type: none"> • Using heavy tools <p>Exercise</p> <ul style="list-style-type: none"> • Walking 4 mph • Bicycling 10 mph • Skating • Hiking • Square dancing • Horseback riding 	<p>Home activities</p> <ul style="list-style-type: none"> • Mowing lawn with hand mower <p>Occupational activities</p> <ul style="list-style-type: none"> • All activities listed previously <p>Exercise</p> <ul style="list-style-type: none"> • Walking or jogging 5 mph • Bicycling 11 mph • Tennis (singles) • Waterskiing • Light downhill skiing 	<p>Home activities</p> <ul style="list-style-type: none"> • Sawing hardwood <p>Occupational activities</p> <ul style="list-style-type: none"> • Digging ditches • Moving heavy furniture <p>Exercise</p> <ul style="list-style-type: none"> • Touch football • Swimming • Basketball 	<p>Home activities</p> <ul style="list-style-type: none"> • All activities listed previously <p>Occupational activities</p> <ul style="list-style-type: none"> • All activities listed previously <p>Exercise</p> <ul style="list-style-type: none"> • Running 5.5 mph • Bicycling 13 mph • Swimming • Handball • Cross-country skiing 	<p>Home activities</p> <ul style="list-style-type: none"> • All activities listed previously <p>Occupational activities</p> <ul style="list-style-type: none"> • All activities listed previously <p>Exercise</p> <ul style="list-style-type: none"> • Running 6 mph or faster • Handball (competitive) • Gymnastics • Football

MET level is the approximate amount of energy a person uses during physical activity. These **levels** are used as a reference point during Cardiac Rehabilitation to determine how hard an individual is working. One **MET** is how much oxygen your body needs when you are sitting. An activity that uses five times as much oxygen is equal to a 5 **MET** level. Our goal is for a person to reach and maintain a 4-5 **MET** level upon graduation.

Importance of **Strength Training**

Strength training helps to develop strong bones. By stressing your bones, **strength training** can increase bone density and reduce the risk of osteoporosis. It also helps to manage your weight and increase your metabolism to help you burn more calories.

- **Improves activities of daily living:** The stronger your muscles, the easier it will be for you to do everyday task.
- **Improves your balance and stability:** The stronger and more resilient your muscles are the better your balance will be. This will help to decrease the risk of falls or accidents.
- **Builds muscle strength:** Strength training will help to prevent muscle loss as we age and rebuild what we may have lost.
- **Decrease your risk of osteoporosis:** Inactivity and aging can lead to a decrease in bone density, leading to brittleness. Consistent strength training can increase bone density and prevent osteoporosis.
- **Reduce blood pressure:** Strength training can be beneficial for the prevention and treatment of high blood pressure by strengthening the heart, allowing it to beat more efficiently.
- **Increase calorie burn:** Strength training increases the body's metabolic rate, causing the body to burn more calories throughout the day. This aids significantly in long term weight loss.

Frequency and Intensity of Strength Training

- Start by strength training **2 days/week**, building up to **3 days/week**. Make sure you have at least one day of rest in between each session.
- Start with **3-4 exercises** for lower body, upper body or abdominal and back. Do not work the same muscle groups on consecutive days.
- Start with **one set of each exercise (10 – 12 repetitions)** using hand weights, resistance bands or your own body weight. As you progress you can work up to **2 – 3 sets**.
- As you add additional sets, **rest 30 seconds to a minute** between each one.
- **NEVER** hold your breath during the exercises. Always exhale when exerting force (on the hard part of the movement.)
- Always **warm up** before and **stretch** after each session.
- Pay attention to **proper form** and **technique**, as they are very important for **injury prevention**.
- When selecting a weight, it should be heavy enough that you feel the muscle working. The weight should be light enough that you can do **12 repetitions** without pain or breaking proper form.
- Strength training should never be painful! If you experience pain, stop the exercise immediately.

Workloads in Cardiac Rehab

Equipment	Workload		Duration
Treadmill	mph	%	mins
Recumbent Bike	level	watts	mins
Pro2	level	watts	mins
NuStep	level	watts	mins
Elliptical	level	watts	mins
Schwinn Airdyne		load	mins
Upright Bike	level	watts	mins

Your Target **Heart** Rate Range
(THRR) is: _____ bpm

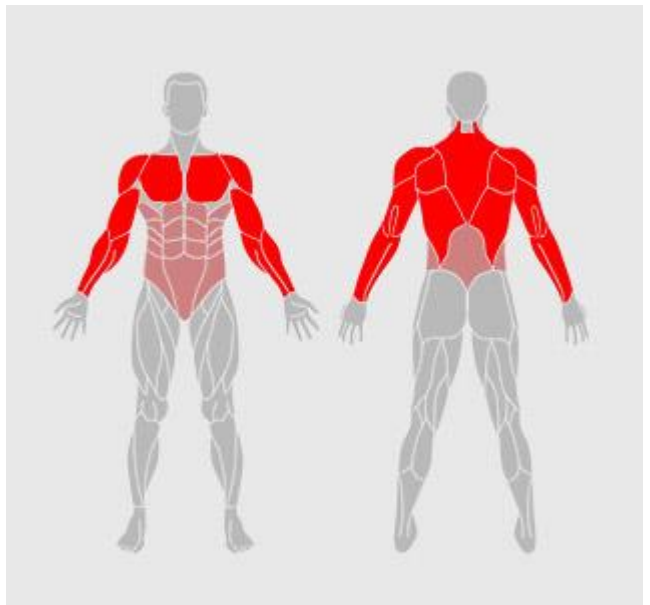
Goal: Exercise **4 – 6 days** a week or a total of **150 – 300 minutes** a week (approximately **30 minutes** per day!)



Strength Training Exercises

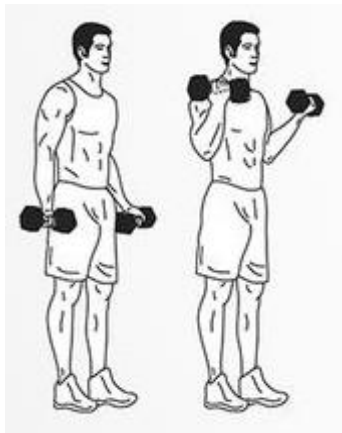


Upper Body

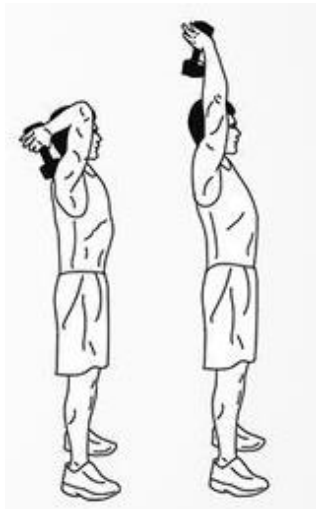


Using: *Weights*

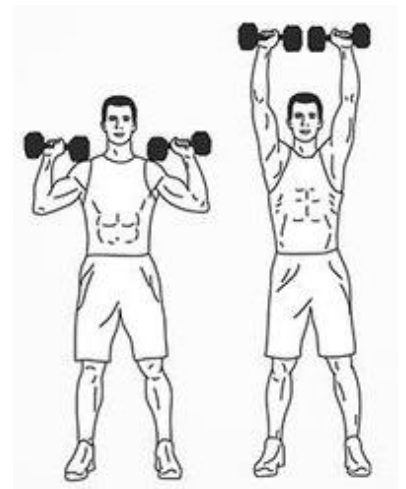
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



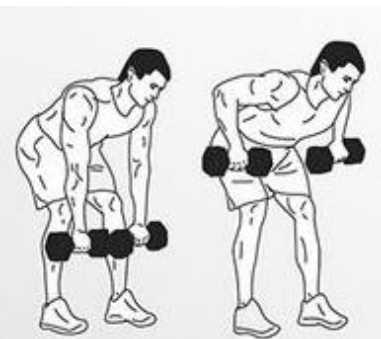
Bicep curls



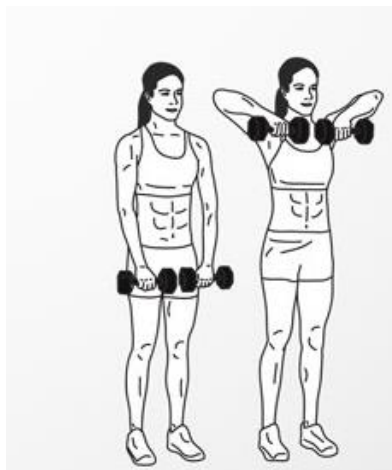
Tricep extensions



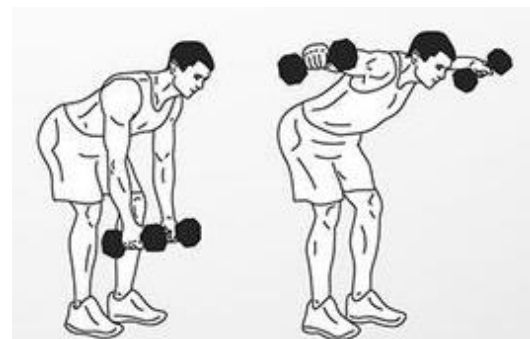
Shoulder press



Bent over rows

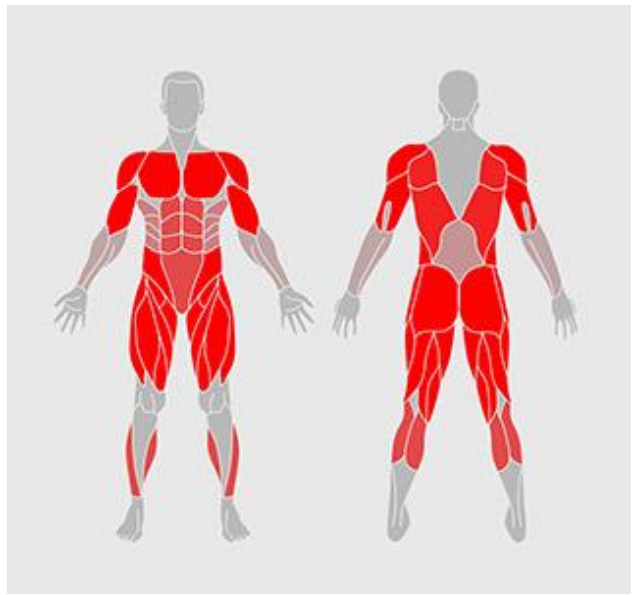


Upright rows



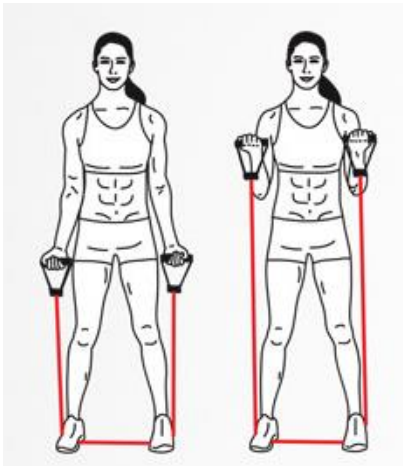
Bent over raises

Upper Body

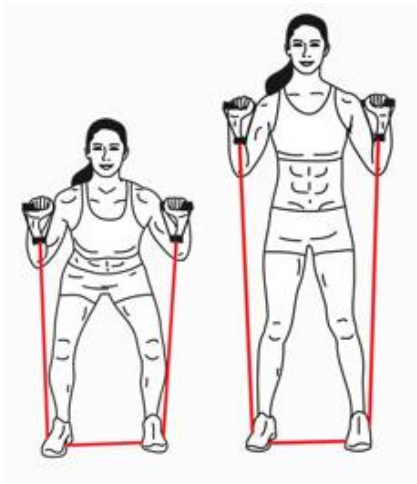


Using: *Bands*

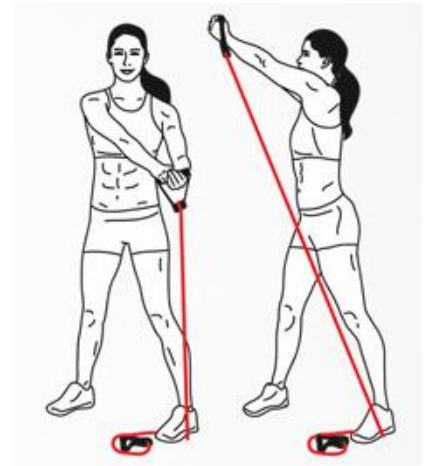
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



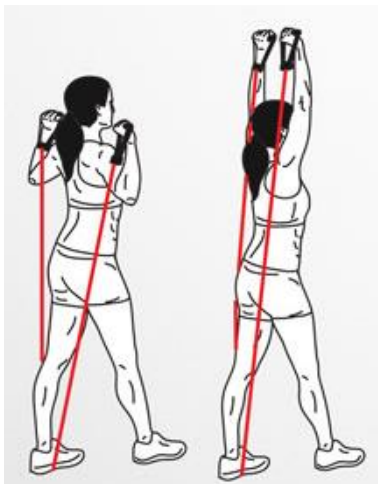
Bicep curls



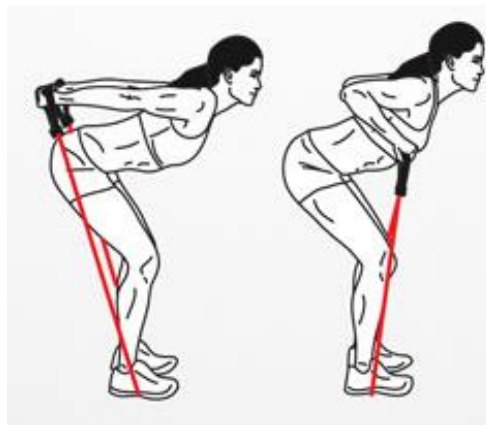
Squats



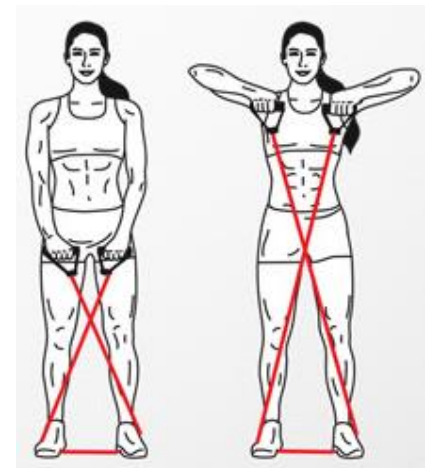
Shoulder stretch



Cross body reach

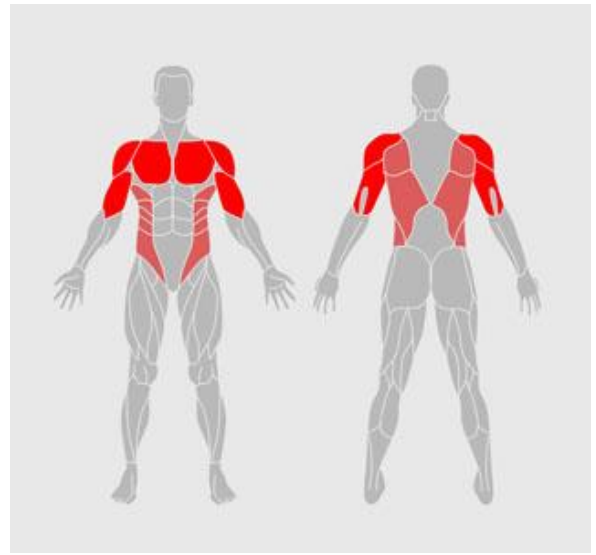


Tricep extensions



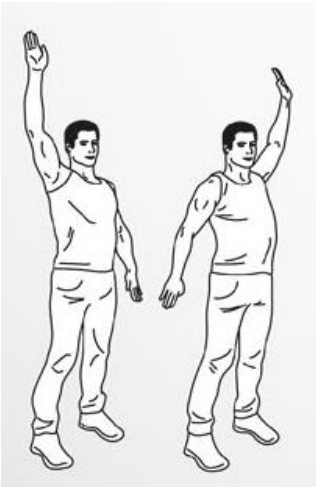
Upright rows

Upper Body

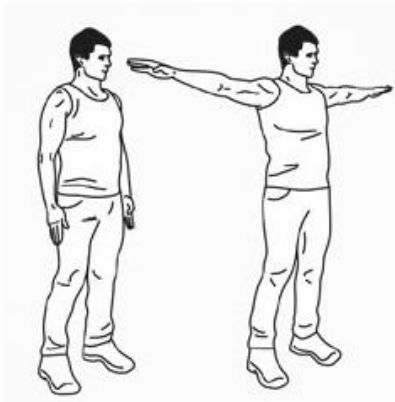


Using: *No equipment*

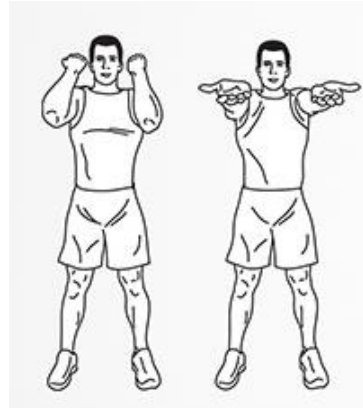
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



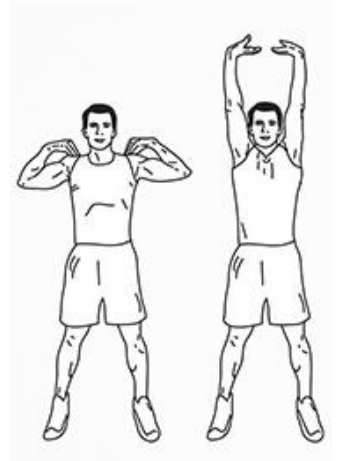
Alt chest expansions



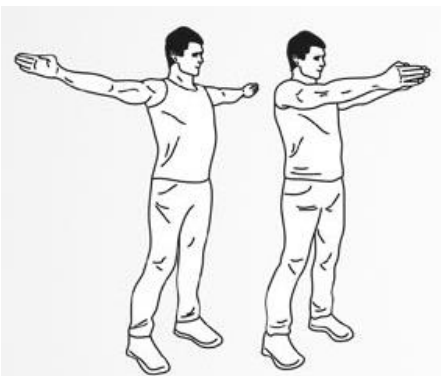
Side arm raises



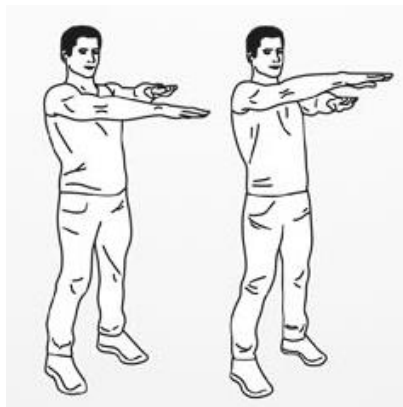
Bicep extensions



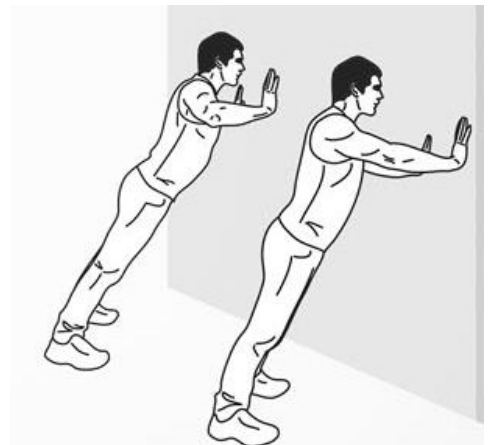
Shoulder taps



Chest expansions



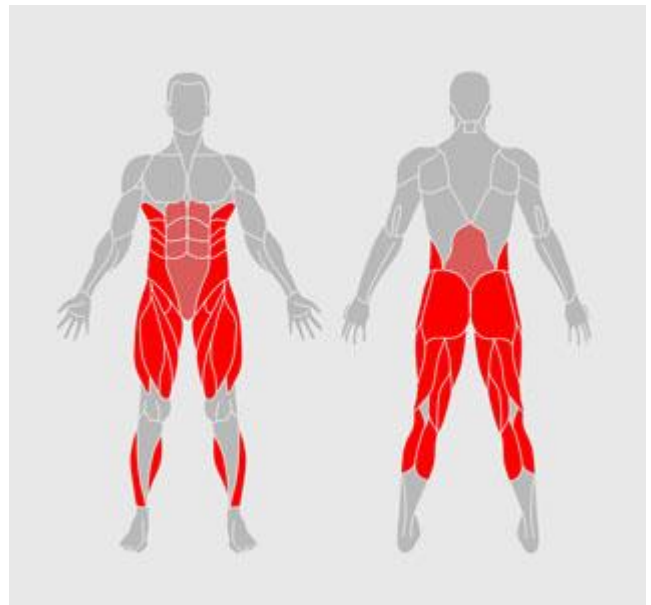
Arm scissors



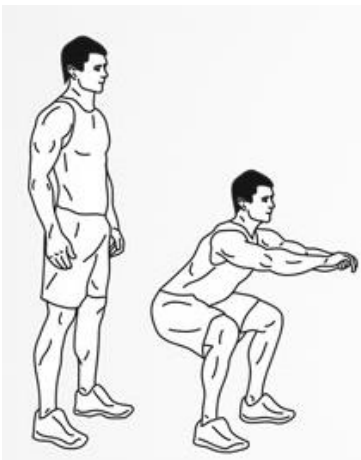
Wall pushups

Lower Body

Standing



Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



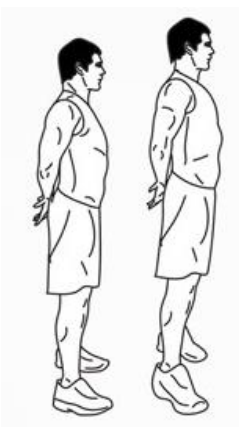
Squats



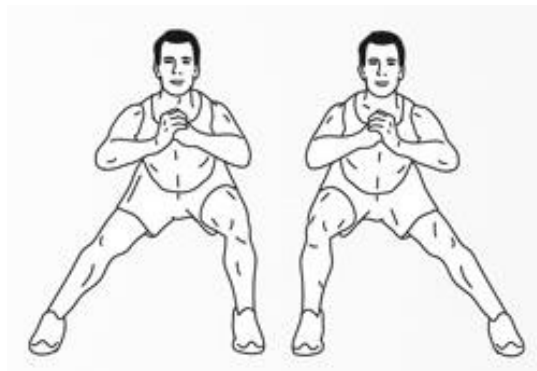
Lunges



Lunge step-ups



Calf raises



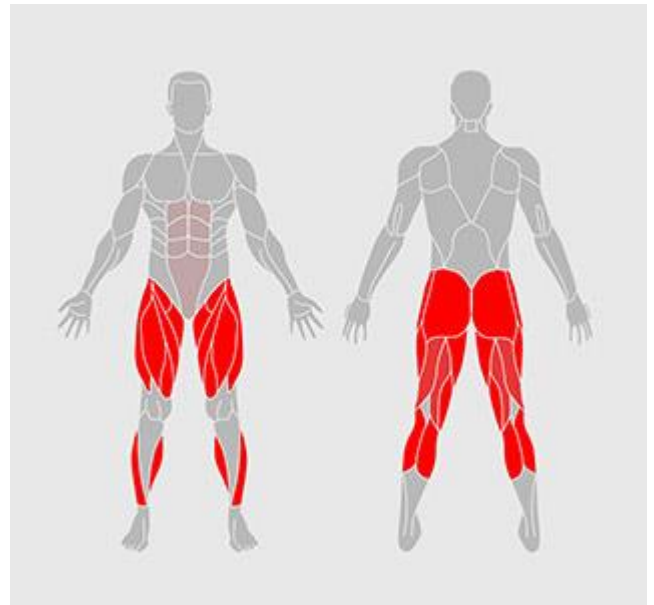
Side-to-side lunges



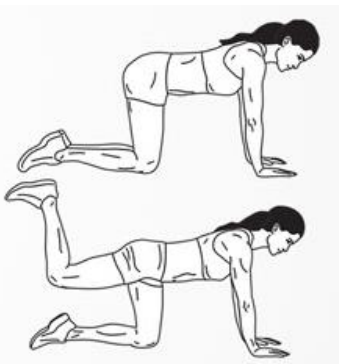
Side leg raises

Lower Body

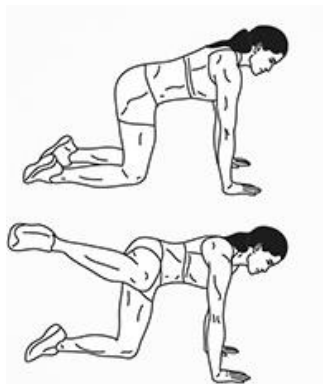
Floor



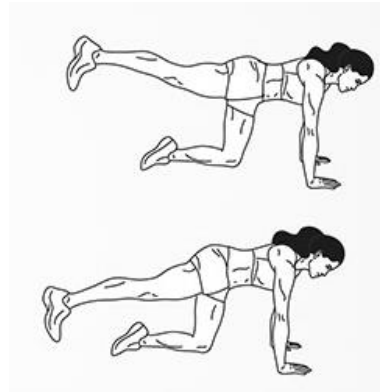
Reps: 10 – 12 **Sets:** 1 – 2 **Rest 2 minutes between sets**



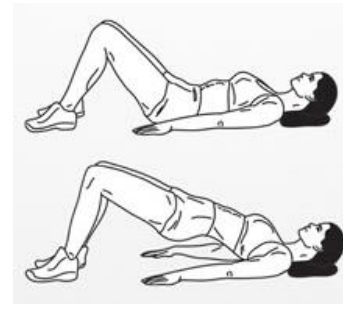
Donkey kicks



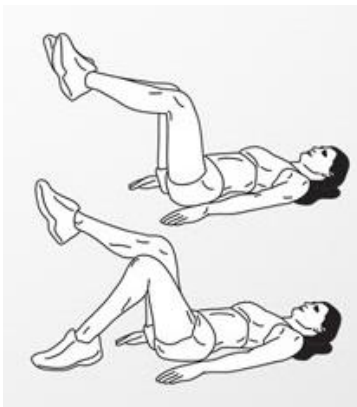
Fire hydrants



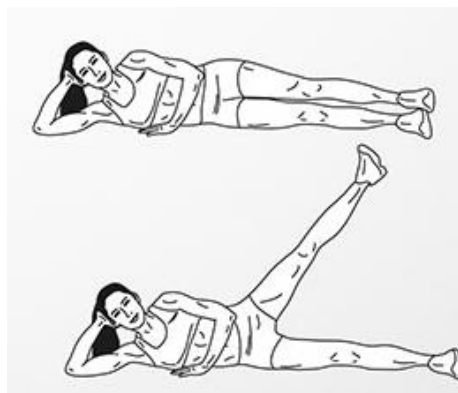
Leg lift



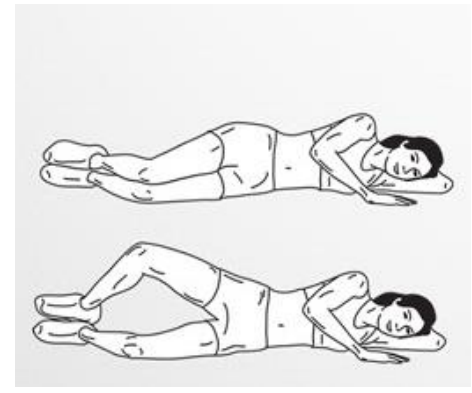
Bridges



Toe taps



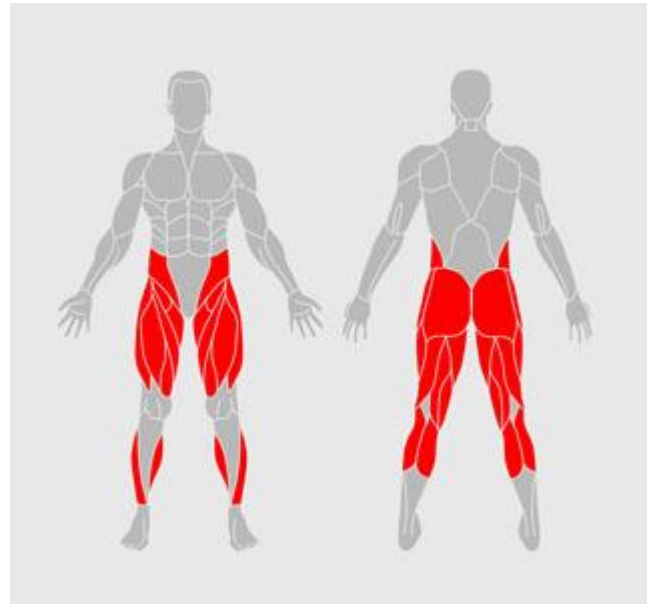
Side leg raises



Clamshells

Lower Body

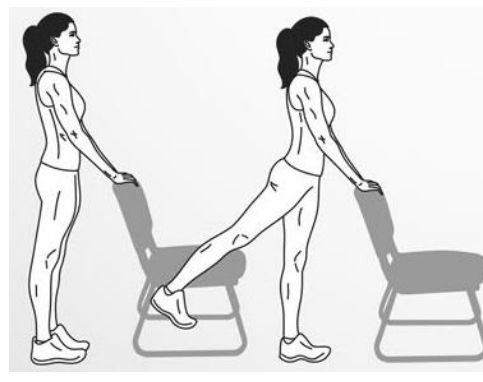
Chair



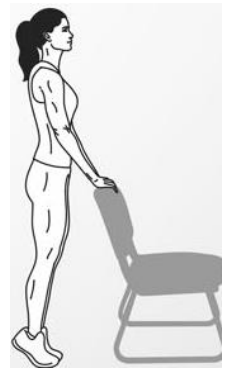
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



Side leg raise



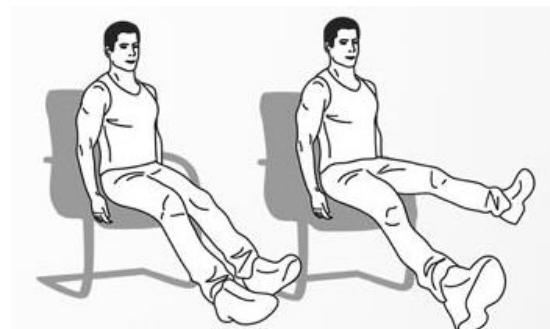
Kick back



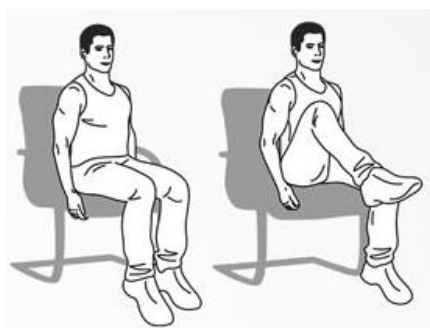
Ankle raises



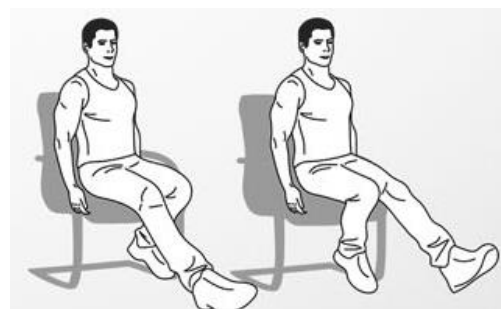
Cycling



Alt leg lifts



Alt knee raises

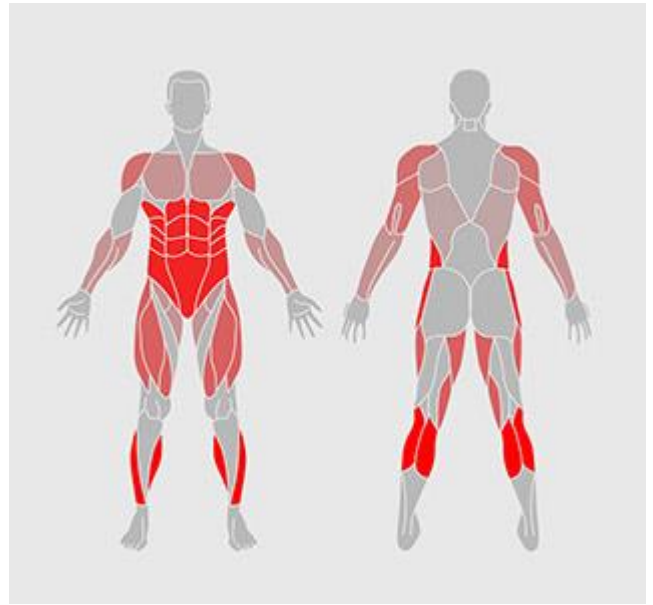


Alt heel taps

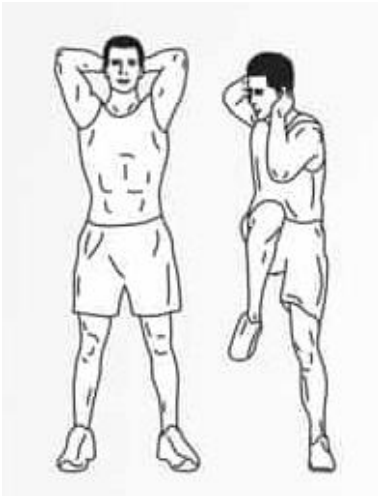
Ab

Exercises

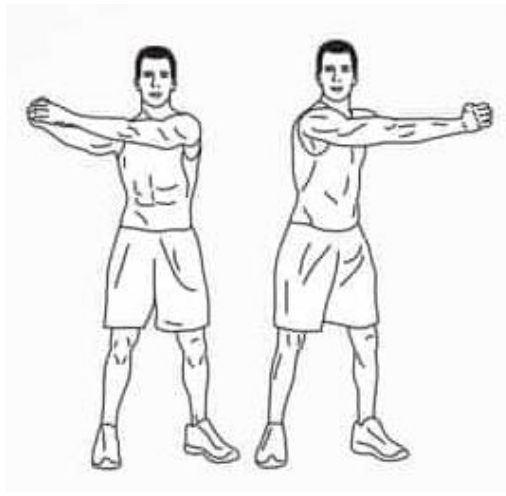
Standing



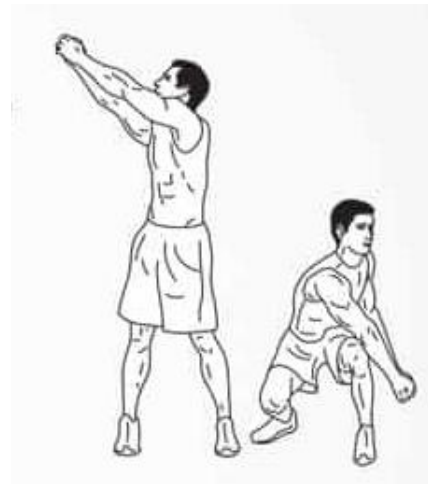
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



Knee-to-elbows



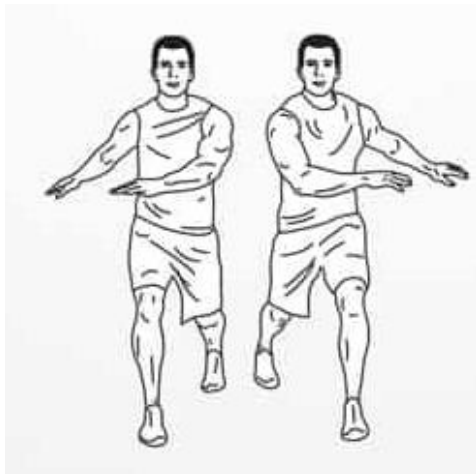
**Side-to-side
chops**



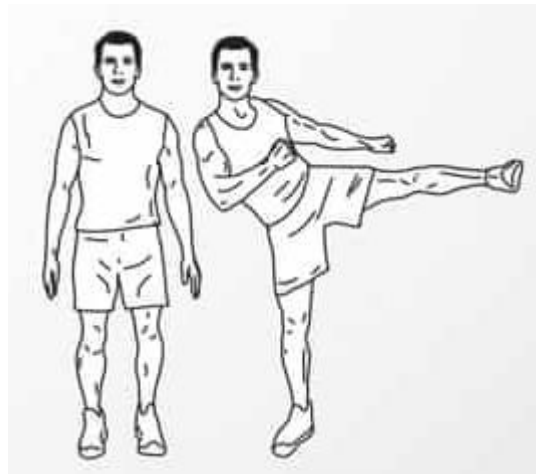
Cross chops



High knees



Twist jumps

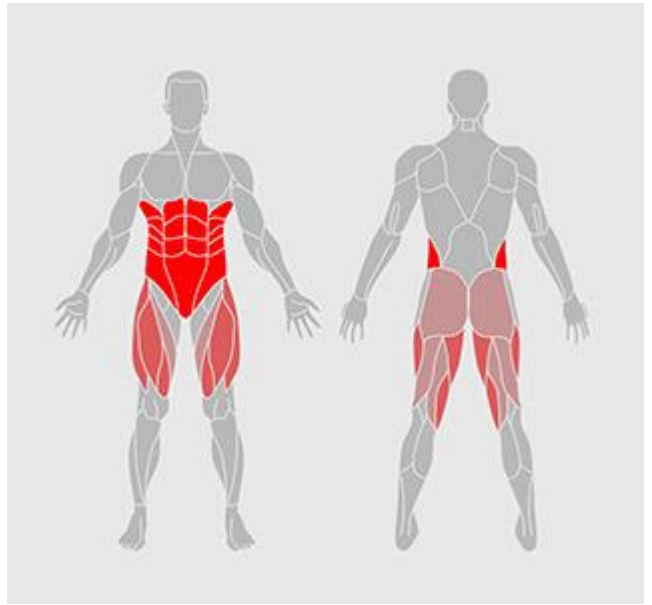


Side leg raise

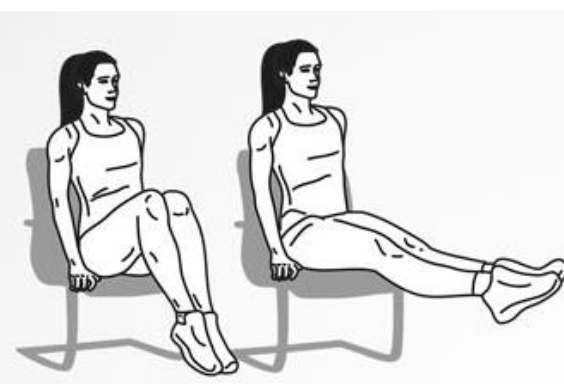
Ab

Exercises

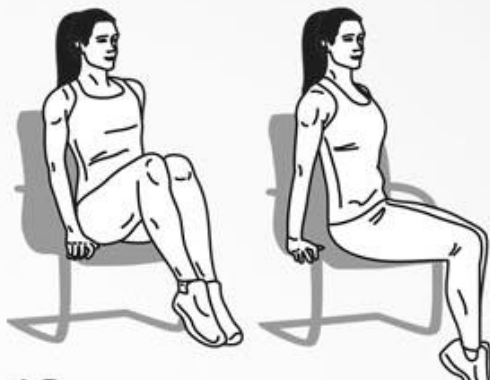
Seated



Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



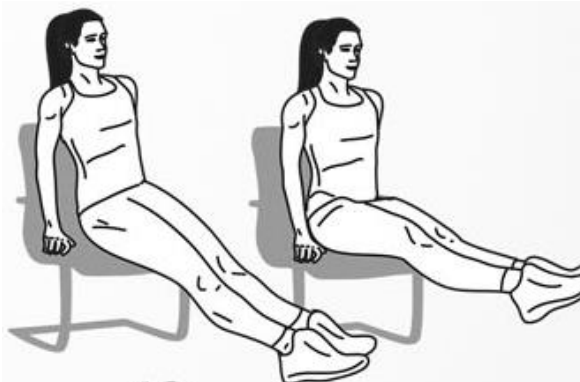
Crunch kicks



**Side-to-side
knee sweeps**



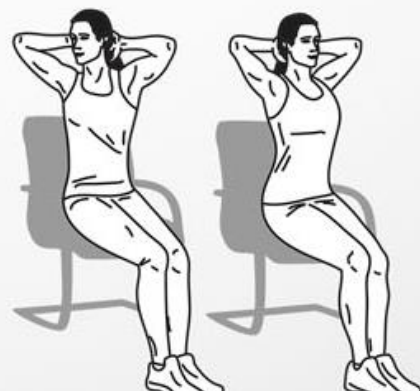
Knee-to-elbows



Leg raises



**Cycling
crunches**

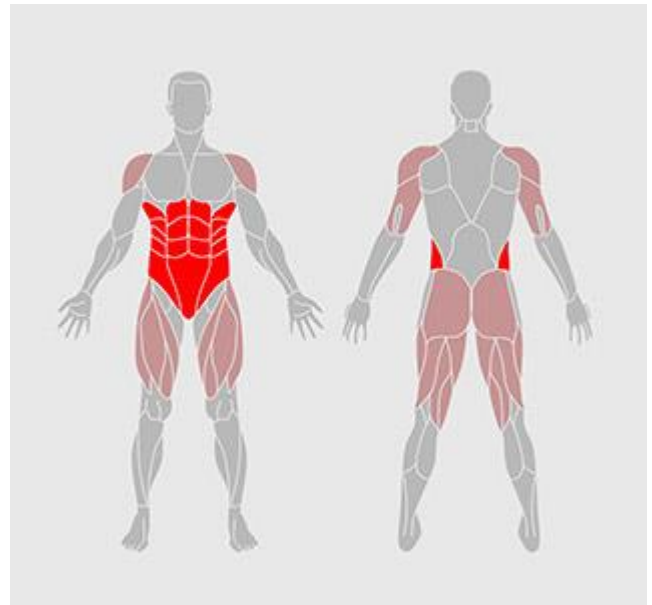


Sitting twists

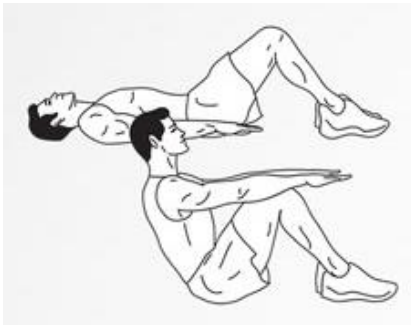
Ab

Exercises

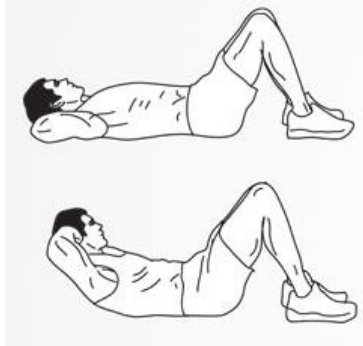
Floor



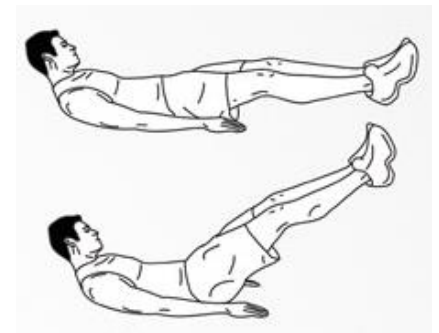
Reps: 10 – 12 **Sets:** 1 – 2 **Rest** 2 minutes between sets



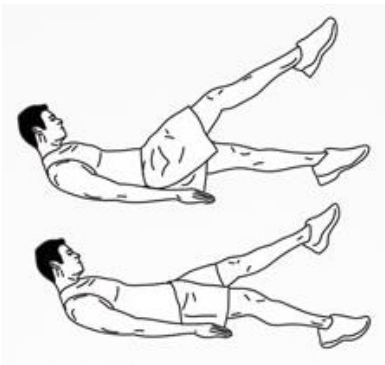
Sit-ups



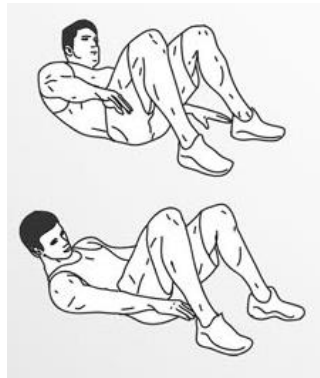
Crunches



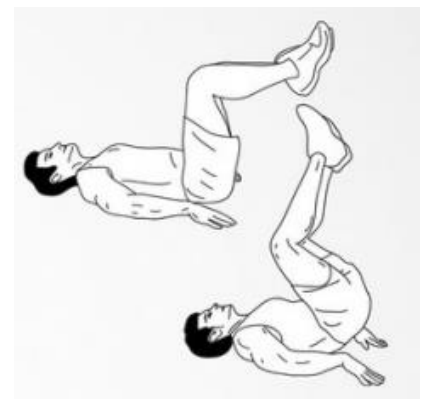
Leg raises



Flutter kicks



Heel taps



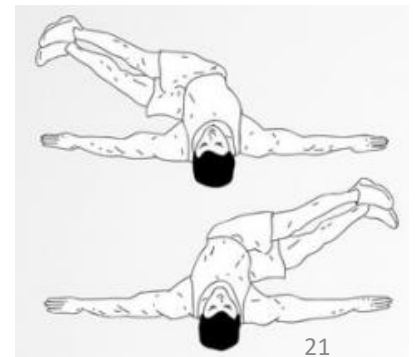
Reverse crunches



Sitting twists



Bicycle crunches

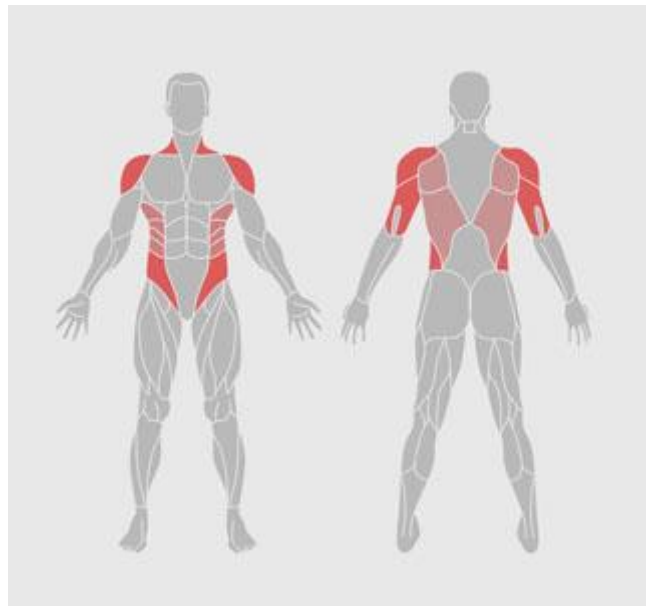


Windshield wipers

Stretches



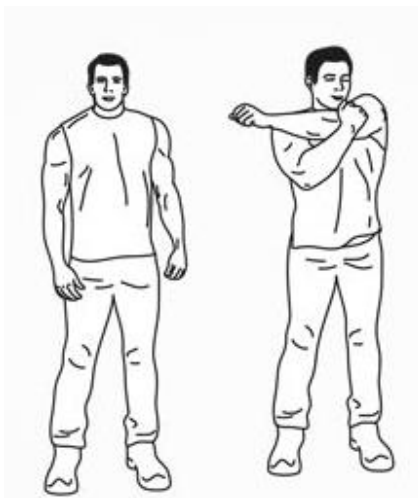
Upper Body Stretches



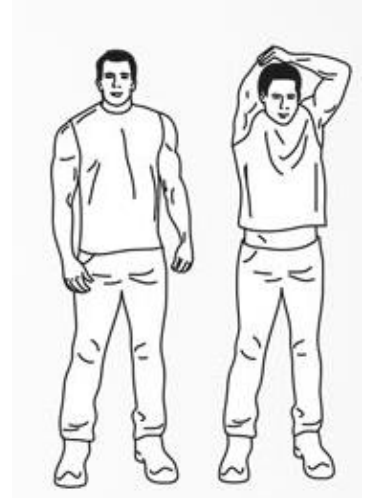
Hold each stretch for 20 – 30 seconds



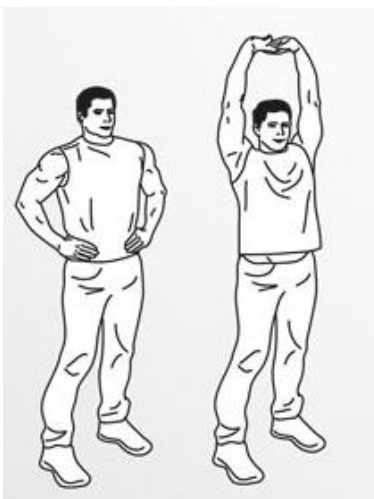
Neck



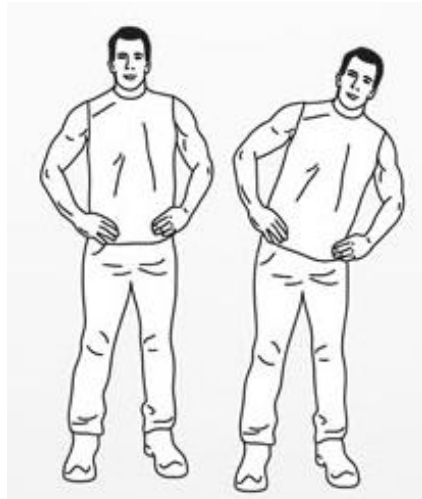
Shoulder



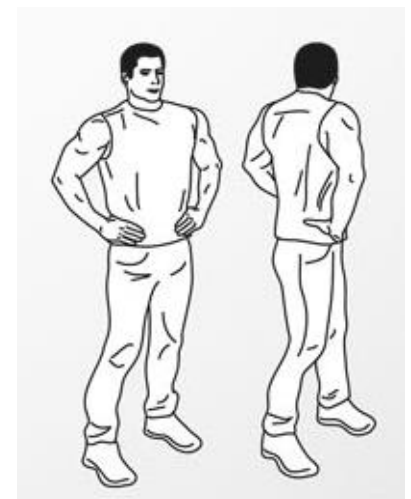
Triceps



Back & shoulders

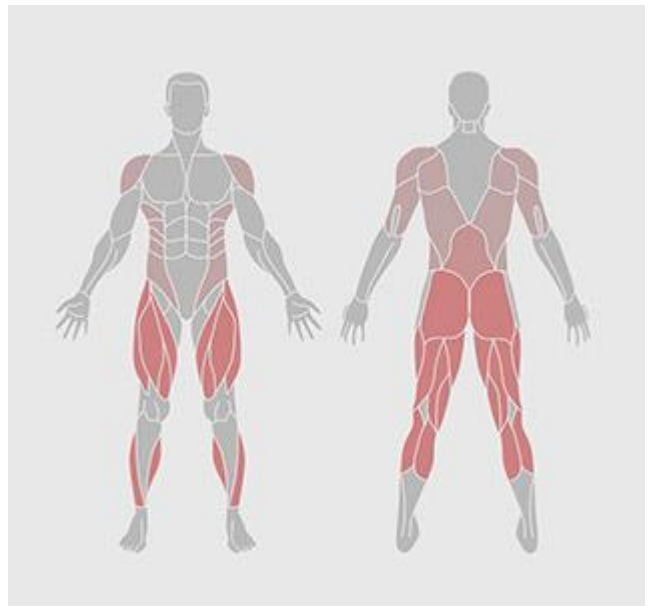


Side bends



Torso rotations

Lower Body Stretches



Hold each stretch for 20 – 30 seconds



Glute



Quad



Lunge



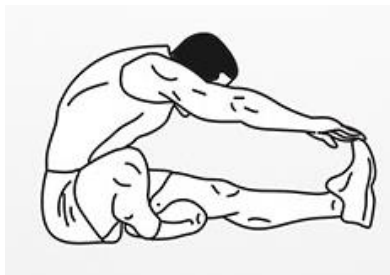
Reach forward



Calf raise



Step forward



**Single leg
forward**



Single leg raise

Section 4: Safety

This section includes examples of the methods and strategies programs used to address emergencies and safety concerns. The contributor for each resource is included.

4a: Adverse Events and Emergency Protocol

Contributor: Javier Loureiro Diaz, Senior Clinical Exercise Physiologist (ACSM-CEP), Heart Hospital/Qatar Rehabilitation Institute

Outline and Priorities

- Safety Policy should be made available and accessible to patients.
- Implement record of critical and non-critical events and complications on site vs HYCR
- Although safety of home delivery of CR was recently highlighted within the release in 2019 of the AACVPR/AHA/ACC Scientific Statement for Home-Based Cardiac Rehabilitation, a literature review will be conducted by the members of the Department to assess suitability and establish safety criteria and inclusion criteria to the program.

Non-critical Emergencies

- Examples: hypo/hyperglycemic, chest pain, fatigue ...
- Patient:
 - Signaling: We need a way for patients to notify the nurse when he/she leaves the group to go to the virtual waiting room for review phone call: Patient is to sit on chair near the device and perform a pre-agreed hand signal (wave on screen).
 - Exercise Physiologist and Nurse communicate via voice to address this topic.
 - Patient exits to virtual room and sits down by laptop to discuss situation with nurse. Remember that glucose tablets, inhalers or GTN should be kept by the screen.
- Nurse:
 - Engage with patient from Waiting Room
- Exercise Leader:
 - Continue with class unless nurse is already busy with other patient, in said case cool-down and counsel patient on waiting room.

For Critical Emergencies

- Examples: cardiac arrest, fall and injury, loss of consciousness, ...
- Nurse:
 - Activate emergency (999):
 - Provide details of the event:

- Provide address: This information will be collected by the Exercise Team and readily available and written into the Online Exercise Class Handover Sheet for ease of access:
 - Zone
 - Street Name
 - Building Number
 - Apartment Number
- Exercise Leader:
 - perform a cool down
 - communicate with nurse as soon as possible

For Technical Issues Emergencies

- Instructor Connection Lost / Feed Frozen
 - Patient must keep feet moving on the spot
 - Wait up to 2min for feed to come back or instructor to bring you back into the call
- Patient Connection Lost / Feed Frozen
 - Patient must keep feet moving on the spot
 - Wait up to 2min for feed to come back
 - If not resumed hang up and join the waiting room via the original link the instructor will bring you into the class again
- You may receive a phone call from the CR team

4b: Cardiac Rehab Session Monitoring—Patient Agreement

Contributor: Melissa McMahon, MS, ACSM EP-C, Manager, Cardiopulmonary Labs, Ann and Robert H Lurie Children's Hospital of Chicago

How It Works

- Remote monitoring allows your care team to assess your cardiac rhythm during scheduled cardiac rehab sessions by using a home monitoring device.
- You have been provided with a home monitor that can **only** be used during a scheduled cardiac rehab session, under the direction of the cardiac rehab care team.
- Your device will only be activated during your session and will be deactivated at the end of each session.
- During your session, the cardiac rehab care team will have the ability to assess heart rhythm strips, triggered by you or the device, periodically throughout the session.
- The device does not monitor or evaluate heart rhythm outside of cardiac rehab sessions.

Important Terms That I Agree To

- I understand that technical difficulties can occur which may result in rescheduling my session
- It is the responsibility of an adult to supervise, and maintain the device, as well as store it in a safe place when not in use to prevent damage or misplacement.
- It is my responsibility to return the device at the completion of the cardiac rehab program.
- I understand that if I am unable to attend my last, in person, cardiac rehab session, it is my responsibility to mail the device back to the cardiac rehab department to prevent charges.
- I understand that the device is not monitored outside of a cardiac rehab session. The device should not be used or applied unless directed by a member of my cardiac rehab care team.
- I understand that if I wear or use the device outside of a cardiac rehab session, or not in-line with instruction from my cardiac rehab care team this will be Unauthorized Use. I agree that Lurie Children's shall not be responsible or liable for any damage or injury to any property or to any person or persons at any time arising from Unauthorized Use. I shall not hold Lurie Children's in any way responsible or liable and will indemnify and hold Lurie Children's harmless from and against any and all claims, liabilities, penalties, damages, judgments and expenses (including, without limitation, reasonable attorney fees and disbursements) arising from injury to person or property of any nature arising out of Unauthorized Use.



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

- It is my responsibility to contact my care team with my healthcare questions and concerns. It is also my responsibility to send or push the data from the device during my scheduled cardiac rehab sessions under the direction of a cardiac rehab team member
- If I or the patient is having an emergency, I will call 911.
- For questions or symptoms that are not an emergency, I will contact the Division of Cardiology during the day at 312-227-4100, or on-call cardiology after hours at 312-227-4000 (ask for cardiology on call)

By signing below, I agree that I want to participate in the Hybrid cardiac rehab program and by doing so, I agree to these important terms.

Patient Name:

Patient Signature:

(Ages 12 and older)

Phone: _____ Date: _____

Parent/Guardian Name:

Parent/Guardian Signature:

Phone: _____ Date: _____

4c: Aultman AmwellNow Telehealth Visits—Cardiopulmonary Rehabilitation Policies and Procedures

Contributor: Ashley Eckroate, BSEP, TTS, CCRP, Cardiopulmonary Rehabilitation Exercise Leader, Aultman Deuble Heart and Vascular Hospital

(This policy rescinds any previous publication covering the same material)

- A. Policy:** The Telemedicine policy is designed to aid the Aultman Cardiopulmonary Department in providing healthcare services to patients via telemedicine/Telehealth.

- B. Purpose:** To enable Health Care Providers (OHCP) located at Aultman Hospital, Aultman North, or Aultman Massillon to deliver provider visits, supportive care services, exercise therapy, and education through an individual and group platform via telemedicine, to patients outside of the physical office locations. Telemedicine helps facilitate the management and coordination of care for patients by increasing access to care, promoting continuity of care, and improving quality.
 - 1. The policy addresses the following aspects:
 - a. Telemedicine personnel
 - b. Emergency Protocol
 - c. Training
 - d. Patient records
 - e. Consents
 - f. Network connectivity
 - g. Use of telemedicine equipment
 - h. Quality and safety

Where applicable, staff should consult other Aultman Hospital, Aultman North, or Aultman Massillon policies and procedures, including those pertaining to patient privacy, information security, and quality assurance.

C. Definitions:

- 1. **Originating Site.** The site where the patient is located at the time the service is provided.
- 2. **HIPAA.** The Health Insurance Portability and Accountability Act of 1996, (“HIPAA”) and the Health Information Technology for Economic and Clinical Health Act, Public Law 111-005 (“HITECH Act”), and the final regulations to such Acts that the U.S.

Department of Health and Human Services (“HHS”) has promulgated and set forth in 45 C.F.R. Parts 160, 162, and 164 (collectively, the “HIPAA Rules”).

3. **Distant Site.** The site where the Practitioner and/or Healthcare Professional providing the professional services is located.
4. **Electronic Medical Record.** An electronic account of a patient’s telemedicine consultation maintained by Aultman Hospital, Aultman North, or Aultman Massillon because of services rendered under this telemedicine program.
5. **Healthcare Professional.** A licensed healthcare professional, including registered nurses and respiratory therapists who are permitted by State law to provide healthcare services to patients via telemedicine or otherwise. Exercise staff including exercise physiologists and exercise leaders who have achieved Master’s degrees or Bachelor’s degrees (respectively) and are ACLS certified.
6. **Practitioner.** A physician who is permitted by State law to provide medical services to patients via telemedicine or otherwise.
7. **Hospital Professional.** A hospital employee who has been trained to help staff or patients through Telemedicine /Telehealth – online visit.
8. **Telemedicine.** The use of medical information exchanged from one site to another via electronic communications for the health and education of the patient or health care provider and for the purpose of improving patient care, treatment, and services. “Electronic communications” may include internet, telephone, and facsimile.
9. **Telemedicine Network Coordinator.** -Aultman IT employee will be responsible for AultmanNow software platform, connectivity, equipment needs and overall coordination of American Well -AultmanNow site.
10. **Telemedicine Site Coordinator.** The Practice employee(s) responsible for connectivity and overall coordination of telehealth for the designated Aultman Facilities.

D. Procedure:

1. Telemedicine Coordinator Procedures

- a. Telemedicine Site Coordinator. The Aultman Cardiopulmonary Rehabilitation Department will identify and assign one or more Telemedicine Coordinator(s). Coordinator(s) will be responsible for the following:
 - i. Coordinate the development of workflow strategies between Practitioners involved in the AultmanNow & Aultman.AmwellNow programs and the AultmanNow Telehealth Team.

- ii. Coordinate the development of a process for telemedicine scheduling through the Aultman.Amwell Now scheduler and/or EMR Scheduling.
- iii. Work with the Telemedicine Network Coordinator to maintain an open line of communication to accommodate requests for telemedicine uses.
- iv. Contact the AultmanNow Telehealth Team for questions, concerns, or future projects. - Log Help Desk Ticket- Information Systems- Telemedicine
- v. Contact American Well for Technical Support Issues- Call 1-844-606-1603 or email: amwellnowsupport@amwell.com

2. Healthcare Professional Telehealth Visits

- a. A Healthcare Professional at the Distant Site who has an ongoing treatment relationship with the patient will be physically present during the telehealth visit. This Healthcare Professional is referred to as the “Presenting Professional.” The Presenting Professional shall hold appropriate, required licenses, certifications and shall practice within the scope of such licenses and certifications.
- b. Preparing for the Telehealth Visit.
 - i. The Healthcare Professional will review any pertinent information in the patient’s electronic medical record and verify the consent for online visit is complete.
 - ii. The Healthcare Professional will log into the Aultman-Amwell Now system and prepare for the scheduled visit or On-Demand visit to begin.
- c. During the Telehealth Session.
 - i. The Healthcare Professional will introduce themselves to the patient, who is located at a distant site or sites if in a group setting.
 - ii. The Healthcare Professional will ask for a brief health update, explain the purpose of the scheduled telehealth visit, and gather necessary vital signs.
 - iii. The Healthcare Professional will obtain verbal consent during any encounters that include multiple participants. All participants will be announced and included in the video session.
 - iv. The Healthcare Professional shall provide instruction based on the type of visit (Cardiac Rehabilitation or Pulmonary Rehabilitation), including but not limited to, exercise therapy, breathing training, risk

factor modification, and psychosocial support. Patient care standards are guided by the evidenced based standards set forth by the American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR), American College of Cardiology (ACC), American Heart Association (AHA) and the American College of Sports Medicine (ACSM).

- v. The Healthcare Professional will allow time at the conclusion of the visit to review any questions with the patient.
- d. Following the Telehealth Visit: After the conclusion of the telehealth visit, the Healthcare Professional will:
 - i. Provide documentation of the telehealth visit in the Electronic Medical Record.
 - ii. Communicate any follow up instructions to patient.
 - iii. Send patient online visit documentation and supporting educational resources after the visit, if requested.

3. Practitioner Telehealth Visits

- a. A Practitioner at the Distant Site who has an ongoing treatment relationship with the patient, may be physically present during the telehealth visit. This Practitioner is referred to as the “Supervising Physician.” Supervising Physicians shall hold appropriate, required licenses and certifications, and shall practice within the scope of such licenses and certifications.
- b. Preparing for the Visit.
 - i. The Supervising Physician will review any pertinent information in the patient’s electronic medical record and verify the consent for online visit is complete.
 - ii. The Supervising Physician will log into the Aultman.Amwell Now system and prepare for the scheduled visit or On-Demand visit to begin.
- c. During the Visit.
 - i. The Supervising Physician will introduce themselves to the patient.
 - ii. The Supervising Physician will ask for a verbal consent to participate in group setting rehabilitation and gather a brief health update.
 - iii. The Supervising Physician will allow time at the conclusion of the visit to review any questions with the patient.

- d. Following the Visit. After the conclusion of the telemedicine consultation, the Supervising Physician can access documentation of the telehealth visit in the EMR as signed by the Healthcare Professional.

4. Emergency Protocol

- a. In the event a patient becomes unresponsive or is experiencing a medical emergency the Healthcare Professional will:
 - i. Call 911
 - ii. Inform the Supervising Physician for immediate two-way audio-visual response

5. Training for Telemedicine Personnel

- a. Qualified staff of the Aultman Cardiopulmonary Rehabilitation Department will have appropriate education and training in use of telemedicine platform. Staff will be given educational handouts for training and given log in information.
- b. Basic videoconferencing training.
 - i. All Aultman Cardiopulmonary Rehabilitation staff will have basic training in the telehealth software & equipment.
 - ii. Aultman Cardiopulmonary Rehabilitation Site Coordinators will have more in-depth training to facilitate any issues that arise with the telemedicine platform.
 - iii. Educational handouts will be provided to qualified staff for more details.

6. Patient Records and Informed Consent

- a. Practitioners, Healthcare Professionals, and staff will adhere to the following procedures for documenting telemedicine services in patient records.
 - i. All permanent patient records will be kept at Aultman Hospital, Aultman North, or Aultman Massillon.
 - ii. Practitioners and Healthcare Professionals conducting telehealth visits will document the patient's telemedicine visit in the patient's electronic medical record.

7. Notice of Privacy and Consent

- a. The patient will review the notice of privacy & telemedicine visit information when they sign up & with each online visit. When they select **Join Visit**, they are acknowledging the receipt of Terms of Use and HIPAA.

- b. Patients will be notified by the presenting practitioner or health care professional if visits include multiple participants and give verbal consent at the time of the telemedicine visit.

8. Technical Operations

- a. AultmanNow & Amwell Now online practice will be set up by American Well, AultmanNow Telehealth team and telemedicine coordinators.

9. Network Connectivity

- a. Site Coordinator will contact AultmanNow IT Services/ Telehealth team for any Network connectivity issues or concerns, maintenance, or support.
- b. Site Coordinator will take steps to ensure optimum connectivity of telemedicine platform by testing and monitoring how system is working for the providers.
- c. Testing- Connectivity testing will be coordinated by the Telemedicine Site Coordinator, as needed.
- d. Room Configuration. -The Practitioner or Healthcare Professional should identify an appropriate space for the telemedicine consultation. Ideally, the room should be quiet and in a private, confidential location at Aultman Hospital.

10. Use of Telemedicine Equipment

- a. Presenting Practitioners and Aultman Cardiopulmonary staff will ensure that telemedicine equipment is appropriately maintained
- b. Video Conference Equipment.
 - i. Keep dust-free by using a compressed-gas duster or dust cloth.
 - ii. Clean monitors and cabinet by wiping down with a soft cloth dampened with water, isopropyl alcohol, or mild detergent.
- c. Medical Peripherals- *if applicable* Including the following equipment: Computer/Laptop, Camera, Headset, Otoscopes (Use disposable end pieces when using otoscope), Dermatoscope, Stethoscopes, Any other necessary equipment or materials.
 - i. Immediately after each use of a medical peripheral device, clean by wiping down with a soft cloth dampened with water, isopropyl alcohol, or mild detergent.

11. Clinical Operations

- a. Quality and Safety- Practitioners and staff will ensure the provision of high-quality telemedicine services and a safe and adequate environment at the Distant Site for telemedicine consultations.
 - i. In the event of a mechanical failure of the telemedicine equipment, an alternate videoconference system/site will be utilized if practicable. If none are functioning, appropriate, or available, or if there is a network transmission failure, the telemedicine visit will be rescheduled.
 - ii. Assessment and resolution of the equipment or transmission problems will be initiated as soon as possible.
12. Staff and Practitioners are encouraged to notify the technical support line for technical difficulties in connection with the telemedicine consultation and equipment, and all other problems or errors involving telemedicine equipment, to help monitor for quality and safety issues.
 - a. Contact the AultmanNow E-Health Team for any questions, issues or concerns. Log IT Help Desk Ticket- Telemedicine.
 - b. If technical issue during off shift hours, the staff or providers can contact American Well Customer Support at 1-844-606-1603 or email: Clinical Support for (Carts/Tablets). clinical.support@americanwell.com
Aultman.AmWellNow- URL link- amwellnowsupport@amwell.com
AultmanNow App/Website- customer.support@americanwell.com
13. **Patient Access via [Aultman.AmWellNow.com](https://www.aultman.com) URL Text/email platform-** Device required for the online visit- Computer/laptop with web camera, Mobile Smart phone, or iPad. Google Chrome or Microsoft Edge must be the browser used for Telehealth visits. *Internet Explorer is no longer supported.*
 - a. **Schedule for right now.** This option is if you need to schedule a patient right away. You have the option to send an invite to the patient's email or you can send an url link via text message to their cell phone. **(It is preferred to send patient the url link via text message)**
 - i. Providers and or Staff-Input your Aultman email address, PIN, and your Display Name.
 - ii. You have the option to invite the provider via text message or email address.
 - iii. Next, Invite the patient via text message. You have the option to add a guest via text message or email as well. You can add up to 17 guests.

- iv. You can add a note, which is just the visit topic.
- v. Click Start a Visit
- vi. The patient will receive an email invitation or the url link via text for the appointment

b. Schedule a Visit for Later

- i. Open google chrome and go to aultman.amwellnow.com. You will arrive at the landing/home page of the site.
- ii. Select, **Schedule For Later**. Input your Aultman email address, PIN, and your Display Name
- iii. You have the option to invite the provider via text message or email address.
- iv. Next, select the date, start time, and duration of the visit.
- v. Invite the patient via text message. You have the option to add a guest via text message or email as well. You can add up to 17 guests.
- vi. You can add a note, which is just the visit topic.
- vii. Click Send Invite
- viii. The patient will receive an email invitation or the url link via text for the appointment to start the visit
- ix. See Telehealth Education for more details

14. Billing and Reporting Process (for billable visits only) Each practice may have different set up for billing & reporting.

- a. Billing and Invoice Process- determined by practice
- b. Practice will receive report weekly on number of visits and other details.
- c. Monthly, a designated person from the practice will invoice the telemedicine site coordinator for the number of visits. Including the date/month of visits and cost.
- d. If applicable, the invoice will be submitted on last day of month.
- e. If applicable, the site coordinator will contact the practice cost center representative to transfer revenue to the correct account.

15. Reporting Process

- a. Telehealth team created practice reports as requested and send to designee's weekly and monthly.



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

4d: Wellstar Cardiac Rehab Staff and Patient Participant—Sample Agreement

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary Rehab



Cardiac Rehab Staff and Patient Participant Agreement for Virtual Cardiac Rehab

Cardiac Rehab staff will:

- Schedule all Cardiac Rehab visits, including sessions held in Cardiac Rehab space and virtual cardiac rehab sessions.
- Will be available as needed for 1:1 coaching telephone calls, email, or 1:1 virtual visit outside of regularly scheduled virtual sessions.
- Will document information about each virtual session in EMR (Epic) and notes will be available to view by patients with MyChart access.
- Will communicate with patient physician as needed.
- Will ensure Individualized Treatment Plan is personalized to specific goals and educational needs of each patient.

Staff initials: _____ Date: _____

Patient participant will:

- Have appropriate computer equipment & access to Microsoft Teams.
- Commit to attending Cardiac Rehab sessions in the Cardiac Rehab gym for the first visit (assessment & orientation), attend EKG monitored sessions in Cardiac Rehab gym at least every 30 days for Individualized Treatment Plan updates
- Have appropriate space for home-based workouts, free of tripping hazards and room to move without obstructions.
- Prior to virtual class starting each day provide staff with weight, resting blood pressure and resting heart rate.
- Will notify staff of any symptoms experienced such as chest pain, shortness of breath, dizziness, etc. These vital signs will be heard by other class participants.
- Notify staff if unable to attend any scheduled virtual session or cardiac rehab gym session.

Patient initials: _____ Date: _____

Kennestone Hospital
Cardiac Rehabilitation
 330 Kennestone Hospital Blvd. | Marietta, GA 30060
 Phone: (770) 793.7455. Fax: (770) 793.7456

wellstar.org



4e: Transfer to Cardiac Rehabilitation—Home Program Checklist Example

Contributor: Javier Loureiro Diaz, ACSM-CEP, Senior Clinical Exercise Physiologist, Heart Hospital/ Qatar Rehabilitation Institute

TRANSFER TO CARDIAC REHABILITATION PHASE 2 HOME PROGRAM CHECKLIST

PATIENT DETAILS

HC# _____ Name: _____ Risk Cat: _____ Current Group: _____

TRANSFER DETAILS:

1. Number of completed sessions:
2. Proposed Transfer date:
3. Transfer to Program Type:
 - a. Home Unsupervised and Monitored by Customed ECG
 - b. Home Supervised via VSee and Monitored by Customed ECG
 - c. Home Supervised via Vsee and Monitored by RPE-only
4. Timing:
 - a. MW0730 MW0900 MW1030 MW1200 MW1330 MW1600 MW1730
 - b. STT0730 STT0900 STT1030 STT1200 STT1330 STT1600 STT1730
5. Location: Home Work Home Gym Work Gym *Public areas such as parks or public gyms are not allowed*
6. Equipment available: None Treadmill Cycle Other: _____

PATIENTS CLINICAL STATUS:

1. Eligible to exercise without ECG monitoring? Yes No
 - a. No History of Cardiac Arrest outside the context of ACS
 - b. No history of v-tach or other life-threatening arrhythmia
 - c. Ejection fraction is $\geq 30\%$
 - d. No cardiac symptoms
2. Eligible for Home Program? Yes No
 - a. No complex arrhythmias at rest or exercise
 - b. No significant ST depression / ECG changes on exercise
 - c. No other investigations pending (i.e Holter ECG, Labs,...)
 - d. No Falls Risk identified
3. Is the patient Diabetic? Yes No
 - a. Is his/her blood sugar well controlled? Yes No
 - b. Any episodes of exercise related hypo/hyper glycaemia reported? Yes No
 - c. Does the patient have a Glucometer at home? Yes No
 - d. Comments: _____
4. Is the patient Hypertensive? Yes No
 - a. Is his/her BP well controlled? Yes No
 - b. Any episodes of exercise related hypo/hypertensive responses? Yes No
 - c. Does the patient have a Blood Pressure machine at home? Yes No
 - d. Comments: _____
5. Any recent changes to related interventions?
 - a. Recent change in medications Yes No

TRANSFER DECISION AT TEAM CONFERENCE (Date _____ Physician Present _____)

- APPROVED
- DENIED → Reason: _____
- POSTPONED → Plan: _____

COMPLETING THE TRANSFER:

1. Has the patient been thoroughly explained the Home Program requirements? Yes No
2. Has the patient agreed to the transfer in the above conditions? Yes No
3. Has VSEE application been installed? Yes No
4. Has CUSTOMED ECG equipment unit been assigned and checked for correct functioning? Yes No
5. Collect contact information:

ZONE#: _____ STREET#: _____ BUILDING#: _____ APT#: _____

Phone#: _____ Email: _____
6. Progress Note for CERNER documentation completed: Yes No



AHRQ's Initiative To Increase Use of Cardiac Rehabilitation

4f: Wellstar Emergency Management Policy

Contributor: Phyllis Hyde, BS, Manager, Wellstar Cardiac & Pulmonary

Rehab See the following 3 pages.

POLICY: VIRTUAL VISIT CLASS EMERGENCY MANAGEMENT POLICY

- I. SUMMARY STATEMENT:** Wellstar will make reasonable efforts to ensure patient safety during virtual Cardiac Rehab by adhering to emergency protocols set into place for clinical staff to facilitate appropriate emergent care. If an event arises that is life-threatening or could evolve into a life-threatening emergency, the clinical staff will respond according to the decision tree to ensure appropriate lifesaving measures are immediately initiated.
- II. PERFORMED BY:** Clinical staff with Wellstar Cardiac Rehabilitation
- III. EQUIPMENT:** Telephone, computer, audio-video software
- IV. INTERVENTION:**
- A. Alert and Symptomatic but NOT an Emergency.**
1. During virtual class move/transfer patient to a separate virtual breakout room.
 2. Assess the patient, instruct patient to check blood pressure and heartrate on home blood pressure device and report results to clinical staff on the call.
 3. Based on patient reported symptoms, determine if control of virtual class needs to be transferred to another clinical staff member or if the other patients can continue exercise on their own until clinical staff is able to resume call.
 4. Notify supervising Cardiac Rehab Physician if further evaluation is needed. Notify Cardiologist per standing order or clinical judgement.
- B. Alert, symptomatic, and needs Emergency Services immediately.**
1. Transfer to separate audio-video breakout room if time allows.
 - i. Call 9-911.
 - ii. Notify Supervising Cardiac Rehab Physician to join virtual session.
 - iii. Assign a designee to assume control of ongoing session.
 - iv. Advise patient that you or a designee will stay online until help arrives.
 - v. If the patient ends the telephone call/virtual meeting or you are disconnected, call EMS to alert them that you have lost contact with the patient. Ask for estimated time of arrival, document time in note.
 - vi. Clinical staff or designee is to attempt to contact the patient using available telephone number(s) to ensure their safety.
 - vii. Notify Cardiologist of event after EMS arrives at patients' home.
- NOTE:** If patient objects to EMS dispatch, advise s/he will have the right to refuse upon EMS' arrival. Document patient's objection. Give follow-up instructions to the patient.
2. After the incident is resolved, ensure complete and thorough documentation of the encounter in EMR.
 3. Enter report in online event reporting system.

C. **Patient becomes unresponsive and needs Emergency Services immediately**

1. Call 9-911
 - i. Assign a designee to transfer to separate audio-visual session while EMS is being dispatched. Designee should assume control of ongoing session if other participants are involved, resume or complete session.
 - ii. Notify Supervising Cardiac Rehab Physician to join virtual session.
 - iii. If someone is on-site with patient, advise them that you or a designee will stay online until help arrives.
 - iv. Follow prompts from Dispatcher, relay BLS measures as instructed until help arrives.
 - v. Notify Cardiologist of event after EMS arrives at patients' home.
2. Once incident is resolved, enter report in online event reporting system and complete all documentation in EMR.

Virtual Visit Emergency Decision Tree

Patient reports being symptomatic, or there is an observed change in status.

Patient Alert and Symptomatic but NOT an Emergency

- Assess patient.
- Ask patient to check blood pressure and pulse.
- If further evaluation needed, transfer to separate audio-video session.
- Notify supervising Cardiac Rehab Physician to join call.
- Follow standing orders when appropriate.

Patient is Alert and Symptomatic and needs immediate Emergency Services.

- Transfer to separate audio-video session if time allows.
- Dispatch EMS.
- Notify supervising Cardiac Rehab Physician
- Stay on call until EMS arrives.

Patient is unresponsive.

- Dispatch EMS
- Assign a designee to transfer to separate-audio-video session and assume control of ongoing session.
- Follow prompts from EMS dispatcher.
- Relay BLS measures to others if applicable
- Notify Supervising Cardiac Rehab Physician to join call.

- Notify Cardiologist of event.
- Complete thorough documentation for the encounter in EMR.
- Complete report in online event reporting system.